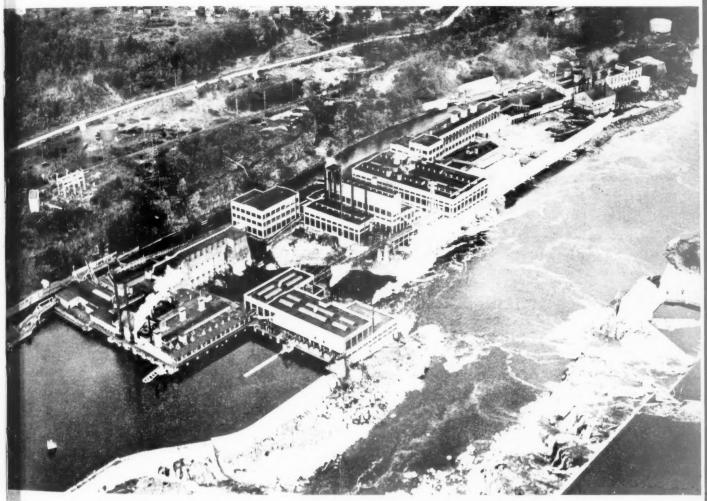
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Volume 3 Number 2 FEBRUARY, 1929

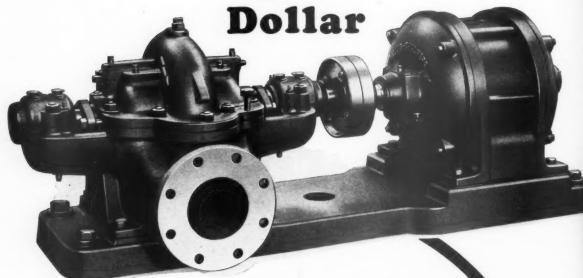
\$4.00 Per Year Single Copies, 35 Cents



WEST LINN, OREGON

An air view of this unit of the Crown Willamette Paper Co. shows to advantage the arrangement of the buildings for straight line production.

The Most Pumping Value per



Combination Priced Centrifugal Pumping Units

are standard Allis-Chalmers Centrifugal Pumps driven by standard Allis-Chalmers Induction Motors mounted on stock sizes of base plates. They are the most pumping value per dollar because of, First—Undivided Responsibility, the complete unit built by one manufacturer with both pump and motor selected to make the most economical unit; Second—No expense charged for special drawings or pattern changes; Third—All parts including base plates taken from stock; Fourth—only one profit on pump and drive; Fifth—Only one selling expense on the unit as a whole. In other words combination priced units allow us to pass on manufacturing and selling economies to the purchaser. We would like to quote you on these units for your pumping requirements.

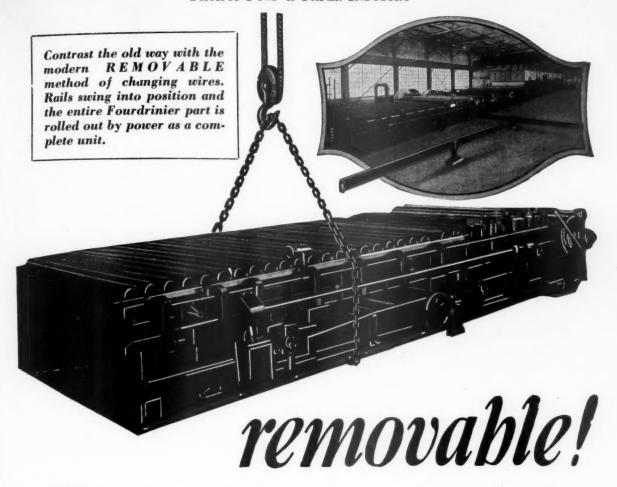
Write for



Bulletin 1632-J

ALLIS-CHALMERS

Pacific Pulp & Paper Industry is published monthly February to December, and semi-monthly in January, at 71 Columbia St., Seattle, Wash. Subscription: U. S. and Canada, \$4.00; other countries, \$5.00. Entered as second class matter May 20, 1927, at the Postoffice at Seattle, under the Act of March 3, 1879. Vol. 3, No. 2, February, 1929.



UNTIL the Removable Fourdrinier demonstrated conclusively that the drudgery of old wire changing practice was obsolete, men practically lifted the entire Fourdrinier by dismantling it and hauling away its individual units. Breast roll, table rolls, savealls, suction boxes, bearings, were taken apart, carried or moved around and re-assembled. Then to get these back in their proper position and in true alignment was another problem.

Today, in the year 1929, we let the Removable Fourdrinier take such management and operating problems off our shoulders. We conserve human energy, save valuable time and preserve expensive equipment from damage by eliminating such needless tasks.

Look where you will and you'll find the *Removable* doing yeoman service in mills where lowered costs and increased output are producing extra dividends.

The BELOIT Way is the MODERN Way

BELOIT IRON WORKS, BELOIT, WIS., U.S.A.

The BELOIT



When writing to Beloit Iron Works please mention Pacific Pulp & Paper Industry

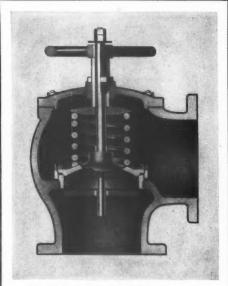




Unusual service under severe conditions

The No. 386 Crane valves have been especially designed for use in exhaust lines, between the engine and the atmosphere, where a considerable amount of back pressure is carried, and to perform the duties of relief valves on low pressure vessels such as condensers, etc. Points of design which enable them to serve efficiently, over long periods of time, under the severe working conditions such usage imposes, are:-

- 1) They are designed to withstand the shock of opening and closing without damage.
- 2) The discs are arranged with pop chambers to insure high opening.
- 3) The adjustable popping chambers are equipped with blow back regulating rings. Accordingly, they are more positive in opening and closing than ordinary valves.
- 4) The adjustment to a new pressure is quite simple, requiring only a turn of the iron handwheel.



The No. 386 Exhaust and Relief Valves are of unusually high capacity.

- 5) After all tensions have been taken off the spring, the valve can be opened by a handwheel and kept in an open position permanently.
- 6) This line of valves can be set to relieve at any pressure specified, between 3 and 20 pounds, when relieving at atmosphere.
- 7) Iron of body, brass of seats and discs, they are remarkably durable.

On request, full information will be furnished regarding these sturdy valves of superior design.

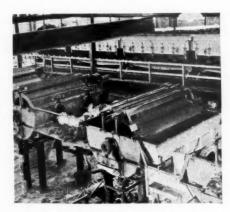
NEW YORK OFFICE: 23 W. 44TH STREET

Branches and Sales Offices in One Hundred and Eighty Cities

452 Oliver United Filter Units



Battery of American Filters being used as groundwood and sulphite deckers and as save-alls.



Battery of Oliver Filters being used as lime mud washers.

143,500 Square Feet of Filter Area

...and their significance

JANUARY IST is a good time to check up.

Up to that time, there have been installed in or ordered by paper and pulp mills 452 individual Oliver United filter units, totalling some 143,500 square feet of filter area.

What does this mean? It means that in many mills fiber losses have been greatly reduced; that deckering is more efficient; that stock for bleaching is more suitable; that stock after bleaching is more thoroughly washed; that better boards are made . . . in short, it means that a number of steps have been greatly improved and costs have been reduced.

The success of these many Oliver United filter units clearly suggest improvements that other pulp and paper mills could make.

OLIVER UNITED FILTERS INC.

Successors to Oliver Continuous Filters and United Filters Corporation

NEW YORK 33 West 42nd St.

London

SAN FRANCISCO Federal Reserve Bank Building CHICAGO 565 Washington Boulevard

LOS ANGELES Central Buildings SALT LAKE CITY Felt Building

Paris Johannesburg Halle, Germany Tokyo Melbourne Scheveningen, Holland

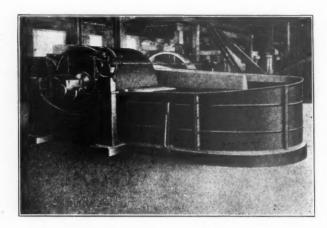
Manila Honolulu Soerabaia, Java Montreal

Factories: Oakland, Calif.; Hazleton, Penna.

Cable Address: OLIUNIFILT

"Your Paper is made in your Beaters"

NEW TYPE HIGH DENSITY BETTER CIRCULATING



THE PROBLEM is "how to beat more stock into better quality with less cost for labor and power."

THE ANSWER is "the Dilts New Type, High Density, Better Circulating Beater, built with high tub and with the roll located toward the rear end."

We could rebuild your Beaters to our NEW TYPE design—



MACHINE WORKS, Inc. FULTON, N.Y.

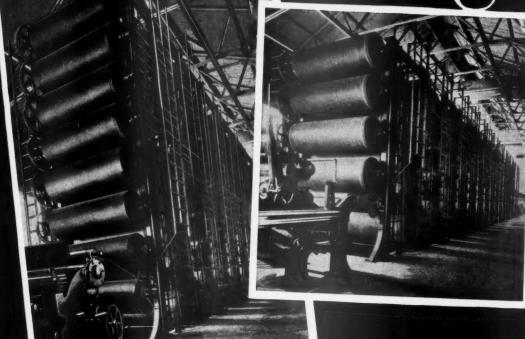
EXPORT OFFICE -15 PARK ROW - NEW YORK CITY

SOME 1928 ORDERS

- Ohio Box Board Co. 8 International Paper
- Ca. 12 Gulf States Paper Corp. 12
- Carp. 6
 Oswego Falls Corp. 4
 St. Regis Paper Co. 8
 Hobile Paper Mills 2
 Consolidated Paper Co. 6
 And Many Others

"Your Paper is made in your Beaters"





During 1928 Black-Clawson furnished the equipment for 819 Vertical Dryers, and Sheahan Carrier equipment for 841 dryers.

Not only did Black-Clawson "build them up" on every board machine contract handled during the year but four other builders also specified Vertical Dryers on contracts taken by them, Black-Clawson furnishing the frames.

-All of which goes to show that Vertical Dryers

are now recognized as standard equipment in the board mill branch of the industry and that they are being specified whenever a new mill is equipped or an old one increases its dryer capacity.

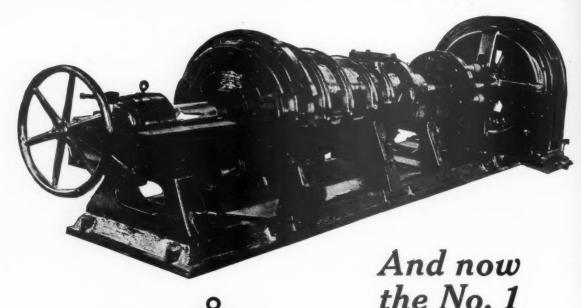
One more word: It is our prediction that all new board machines will be equipped with Vertical Dryers. The economy of drying—the saving of space—the simplicity of operation and reduced maintenance cannot be denied.

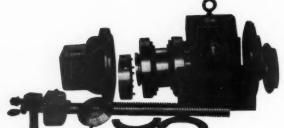
THE BLACK-CLAWSON CO., Hamilton, Ohio

SHARTLE BROTHERS MACHINE CO., Middletown, Ohio Division of the Black-Clawson Co., Export Offices: 15 Park Row, New York City Builders of highest quality paper and pulp mill machinery. Patentees and sole builders of Vertical Dryers and Champion Fourdriniers



Built with Machine-Tool Accuracy





EMERSON JORDAN

TIMKEN EQUIPPED

The bearings on the new No. 1 Emerson Jordan are Sleeve Mounted Timken Roller Bearings. The end bearing shown above takes care of both radial and thrust which is close-coupled with thrust screw and pressure concentric with the center of the shaft.

Both bearing units are mounted on taper-bored renewable sleeves and are readily demountable because not mounted directly on the shaft. They are enclosed in sealed housings.

These strong, dependable Timken bearings are typical of the engineering and care in construction which marks the Emerson Jordan throughout. You can put in an Emerson Jordan with full assurance of lasting efficiency and thoroughly dependable, continuous performance.

Let us submit estimates and prices.

The EMERSON MANUFACTURING COMPANY

Lawrence

Massachusetts

DIVISION OF JOHN W. BOLTON & SONS, INC.



SHARTLE STEAM FITS

"The proof of the pudding lies in the eating thereof."

That is why we announce the arrival of an order from Philip Carey of Lockland, Ohio, for twelve more Shartle Steam Fits.

This Company had already "eaten thereof" and were in a position to appreciate the superior worth of the Shartle kind of steam fit—hence their order for more when more were needed.

Nothing like repeat business to prove the worth of a product to the unitiated. A steam fit that leaks oil and steam is an unnecessary nuisance and expense around a mill and you know the oldfashioned kind are bound to leak, and are always needing oil.

These new Shartles put a stop to that, and they're low in price, too. They pay back their cost over again in the steam and oil they save.

Suppose you get one or two and try 'em out in your plant. You'll never regret it, I'm sure.

SHARTLE BROS. MACHINE CO. Middletown, Ohio

SHARTLE BROTHERS

DIVISION OF THE BLACK-CLAWSON COMP

PAPER MILL

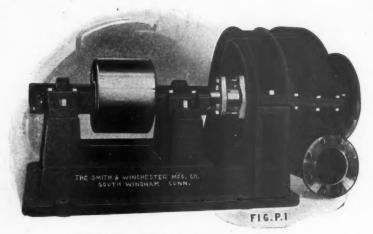


MACHINERY

When writing to Shartle Bros. Machine Co. please mention Pacific Pulp and Paper Industry

PAPER MILL MACHINERY

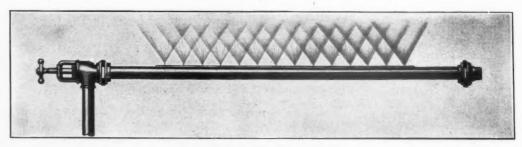
FOURDRINIER-CYLINDER-WET MACHINES



Our Fan Pump for Paper Mill Use

The Undercut Trimmer

PAPER BAG MAKING MACHINERY



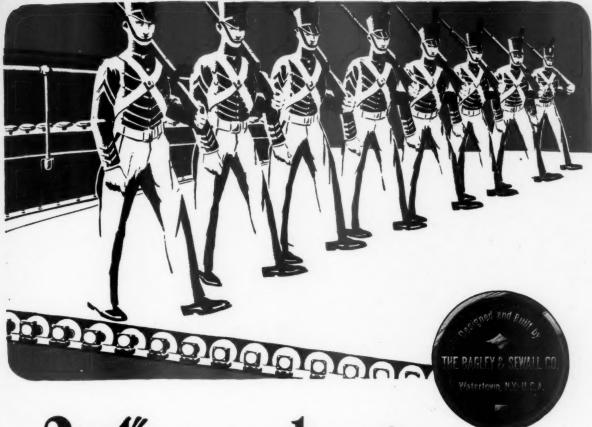
The Rainstorm Shower Pipe

-ESTABLISHED 1828-

The Smith & Winchester Mfg. Co.

Dept. MFP.

SOUTH WINDHAM, CONN.



304 across the wire... Room for a squad to drill!

The biggest Fourdrinier machine ever constructed,—now being built at our Watertown plant. 304 inches across the wire,—planned for a speed of 1500 feet a minute,—meaning a capacity of AN ACRE OF PAPER EVERY 70 SECONDS. Assembled, this behemoth of paper machines will weigh 4,500,000 pounds, yet every moving part is designed for the smooth functioning and easy control that distinguishes all Bagley & Sewall construction.

We invite you, cordially, to come and see this newest marvel of the industry.

The Bagley & Sewall Co.

Watertown, N. Y.



TANNED FELTS FOR NEWS MACHINES

are designed to meet the constantly changing conditions in day-after-day running with CONTINUED high production.

They are designed to afford a reserve margin of safety in STRENGTH, in OPENNESS and in FINISH.

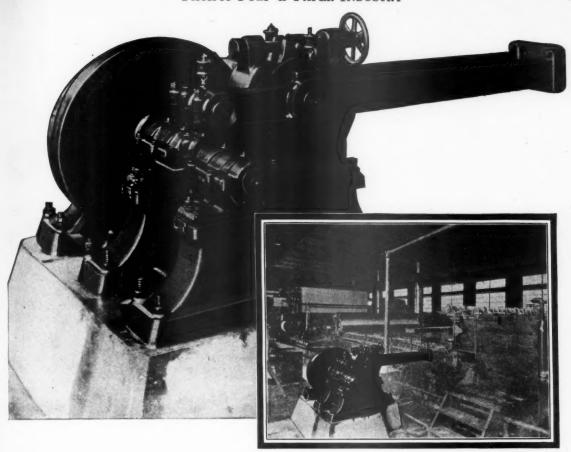
They afford easy starting, reliable, uniform running.

The Kenwood Tanning Processes greatly increase the duration of the initial characteristics of softness, openness and nap that insure satisfactory felt performance.

F. C. HUYCK & SONS

KENWOOD MILLS, ALBANY, N. Y. KENWOOD MILLS LTD., ARNPRIOR, ONTARIO

When writing to F. C. HUTCE & Sons please mention Pacific Pulp and Paper Industry



The SHAKE makes the SHEET

Extra heavy frame—no interfering vibration. Hand Wheel controls stroke. Motor speed governs speed of stroke. Simple, trouble-proof, everlasting.

AND the SHAKE HEAD makes the SHAKE, fast or slow—long or short—whatever speed and stroke you need.

Rice-Barton Shake Head frames are extra heavy—immovable, vibration-proof. Speed of motor can be controlled at will; and power is constant at any speed.

A turn of the Hand Wheel adjusts the stroke. A touch of the switch adjusts the motor.

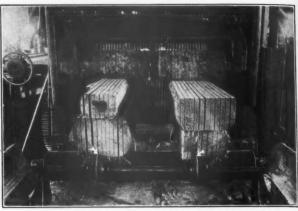
Why not get full particulars and a quotation now?



When writing to Rice, Barton & Fales, Inc., please mention Pacific Pulp and Paper Industry

lumber...

is the father of them all



"An Ever-Increasing Flow of Manufactured Lumber"

PON the solid foundation of Lumber, firmly and permanently rests the entire Commerce of the Pacific Northwest. More than sixty per cent of the entire payroll of the states of Washington and Oregon come from the Lumber Industry; more than fifty-five per cent of the cars shipped from these states during the year 1928 were loaded with lumber. For more than two decades, Washington has led the country in lumber production, with Oregon coming strong as a close second. And in California, Idaho, Montana and British Columbia the production of lumber has been steadily increasing year on year.

There are many up-and-coming industries in the Pacific Northwest, but the majority of these have sprung directly or indirectly from the Lumber Industry—the father of them all.

Your advertisement

in the West Coast Lumberman will be read by the men who buy the machinery, equipment and supplies for the Logging and Lumber Industry of the West. The WEST COAST LUMBERMAN blankets the Lumber Industry of the Far West. For nearly forty years, this most interesting and attractive magazine has been growing in influence and circulation until today it would be difficult to find a Saw Mill, Logging Camp, Woodworking Plant or Shingle Mill who does not subscribe for and read regularly the WEST COAST LUMBERMAN—Pioneer Authority of the Logging and Lumber Manufacturing Interests of the West.

Subscription: U. S. and Canada \$3.00. Foreign \$4.00.

WEST LUMBERMAN

Seattle, U.S.A.



LINK-BELT COMPANY
Leading Manufacturers of Elevating, Conveying, and Power Transmission Chains and Machinery CHICAGO, 300 W. Pershing Road

INDIANAPOLIS, 200 S. Belmont Ave.

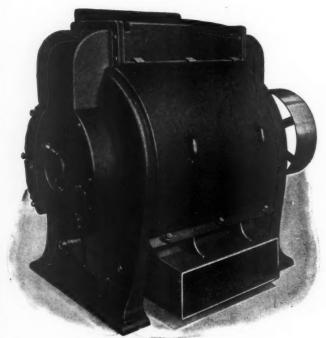
PHILADELPHIA, 2045 W. Hunting Park Ave-

When writing to Link-Belt Company please mention Pacific Pulp and Paper Industry

REED-SPAFFORD

Pulp Screen

For Ground Wood, Sulphite, Soda or Kraft Pulp



A Large Number of Reed-Spafford Pulp Screens Are in Daily Operation in Pacific Coast Pulp Mills

Built in Two Sizes

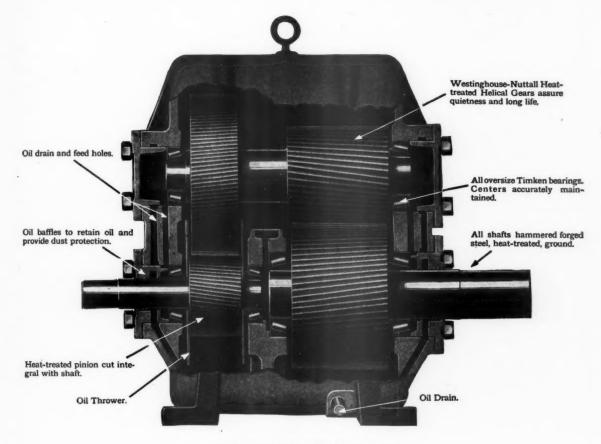
The REED-SPAFFORD PULP SCREEN is remarkably efficient. Its capacity is large and its power consumption is surprisingly low. Let us show you what a saving this screen means to you.

Improved Paper Machinery Company

NASHUA, N. H., U. S. A.

SHERBROOKE MACHINERY CO., Limited SHERBROOKE, CANADA

Speed Reducers for all drives



Westinghouse-Nuttall DVR Double Reduction Speed Reducer, 47:1 ratio.

WESTINGHOUSE-NUTTALL Speed Reducers are manufactured by the R. D. Nuttall Co., Pittsburgh, Pa.

Single reduction up to 450 hp. with a maximum ratio 8:1.

Double reduction up to 200 hp. with a maximum ratio of 47:1.

Send for Speed Reducer Bulletin No. 59.



All Westinghouse-Nuttall products are sold through the Westinghouse Electric & Manufacturing Company Address your inquiries to the nearest Westinghouse office. Canadian Agents' Lyman Tube & Supply Co., Montreal, Toronto, Vancouver

Westinghouse

Accurate Equipment for Testing the Moisture of Your Pulp Will Save You Thousands of Dollars

THE WILLIAMS STANDARD PULP TESTING OUTFIT

Conforms in every detail with the Official Method for the Sampling and Testing of Pulp as approved by the Technical Association of the American Pulp and Paper Industry, the Canadian Pulp and Paper Industry, the American Woodpulp Importers Association, etc.



New Horizontal Model Work-Table Top, Separate Compartments, Quicker Drying

FEATURES

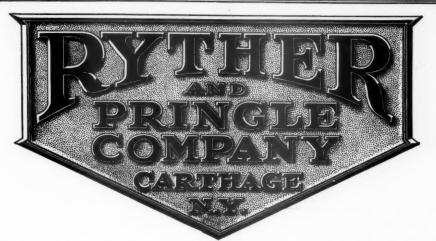
OVEN—Double walled, electrically heated, with thermostat control. SAMPLE TRAYS—Removable for weighing hot samples while covered.

THERMOMETERS—High grade six-inch dial form, one in each compartment.

SCALES—Accurate balances with brass weights, counterpoised tray holder and cover.

It will pay you to write today

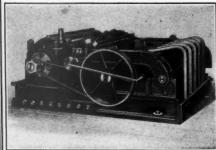
THE WILLIAMS APPARATUS CO., Park Place, Watertown, N.Y.



RYTHER SHREDDER



DISCHARGING SHREDDED STOCK DIRECTLY INTO BEATER TUB ELIMINATING CONVEYING SYSTEM.



SAVES FURNISH TIME SAVES BEATING TIME SAVES POWER

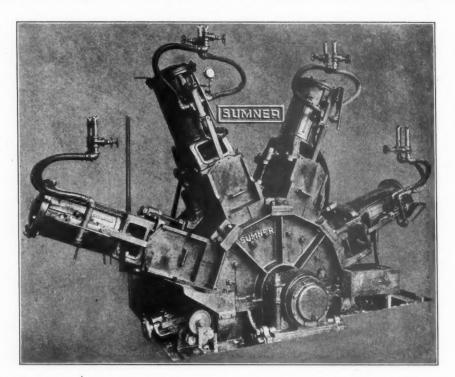
The shredder installation described reduces the return board broke from two machines and also prepares a liner furnish, consisting of groundwood books and papers. The shredder is mounted on an elevated platform and driven by a thirty horse power motor. This setup is able to make a two thousand pound furnish in twenty minutes. Excessive peak loads on the beater drive are eliminated because the stock is delivered into the beater tub in uniformly fine pieces which readily absorb water and are quickly repulped.

Please ask for Bulletin 627

CANADIAN INGERSOLL RAND COMPANY, LIMITED 10 PHILLIPS SQUARE, MONTREAL, P. Q.

SUMNER Four Pocket Pulp Grinders

The Same Now in Operation in the Columbia River Paper Mills, Vancouver, Washington



Machine is of heavy design having rigid webbed sides on large base.

Cylinders are 16-inch bore, brass-lined and are fitted with special three-way valves.

Pistons have special flexible joint connection to rods and pressure feet.

Pockets are adjustable by large bolts to take up for wear on stone, and openings are provided with sliding steel doors. Arbors are of forged steel fitted with case steel flanges with bronze screw bushings.

Bearings may be furnished either lined with babbitt or lignum vitae or fitted with heavy duty Hyatt Roller bearings.

Grinder is fitted with geared screw device for

We also build other machinery for pulp mills and chip plants.

Let Us Figure on Your Requirements

SUMNER IRON WORKS

Factory: Everett, Washington

Canadian Shops: Vancouver, B. C.



Rod Mill Practice

....definitely shown to provide better fibers and more uniform pulp with less power

A CERTAIN plant operating two Marcy Open End Rod Mills recently ordered a third mill, this time for beating rags.

Obviously, if the first two units had not proven their value for beating pulp, this company would not have ordered a third unit.

That the fibers were better and stronger was evidenced by the immediate elimination of practically all machine broke. That the pulp was more uniform was evidenced by the even caliper they were able to obtain across the entire sheet and the absence of screenings which greatly increased the capacity of the screens and in this instance the paper machine.

Marcy Open End Rod Mills have definitely shown that rod mill practice is sound. Thoroughly investigate its advantages for your plant.

MINE and SMELTER SUPPLY SCOMPANY

DENVER

NEW YORK

Licensee under the Marcy Rod Mill Patents

Manufactured in Canada by William Hamilton Limited,
Peterborough, Ontario

FIRM ROLLS SPEED CCURATE CAMACHINE SLITTING AND ROLL- WINDING MACHINES CAMERON MACHINE CO I POPLAR STREET

When writing Cameron Machine Co., please mention Pacific Pulp and Paper Industry.

These are the motors

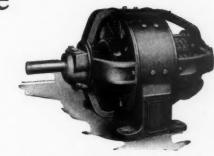
for super-calender drive

Close speed adjustment over a wide range is the primary requisite in super-calender drive. Where direct current is available, the Type CD motor completely fulfills the exacting requirements; for alternating current, two motors of the required size, Types MT and KT, meet every demand.

Extreme simplicity, superior insulation, push-button control, and, above all, ideal operating characteristics make these motors the most satisfactory drive you can have. Design and construction based on years of experience are your assurance of reliable, economical service.

General Electric supplies complete electric equipment for the paper industry. The advice of specialists is readily available through your nearest G-E office.

Apply the proper G-E motor and the correct G-E controller to a specific task, following the recommendations of G-E specialists in electric drive, and you have G-E Motorized Power. Built in or otherwise connected to all types of industrial machines, G-E Motorized Power provides lasting assurance that you have purchased the best.



Type CD direct-current motor



Type MT and Type KT induction motors for two-motor



This Type CD motor is giving excellent service at the Mead Pulp and Paper Co., Chillicothe, Ohio

Motorized Power

-fitted to every need

GENERAL ELECTRIC COMPANY, SCHENECTADY, N. Y., SALES OFFICES IN PRINCIPAL CITIES

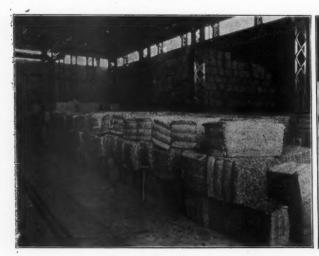
FIDALGO DRYING SYSTEMS

Experience in complete installations make Satisfied Customers



New type pulp shreds coming off Dryers Union Bag Pulp Mill

Drying Unit—Shaffer Box Co. Tacoma, Washington





Unwrapped Pulp Storage, Union Bag Pulp Mill, Tacoma, Washington

Weighing Bales, Union Bag Pulp Mills, Tacoma, Washington

DRY PULP
SAME MULLEN TEST AS WET SHEET
IN BEATER

TECHNICAL ECONOMIST CORPORATION

40 Rector St., NEW YORK CITY

M&W"Rotary creen

with important new features for "ideal" screening

Every one of these points has been considered in building the "M & W" Rotary Screens now being placed on the market.

Recent improvements are fully covered by United States and Foreign Patents.

Write for New

Screen Booklet

View of Rotary Screen with cylinder removed. Note divided diaphragms, large openings.

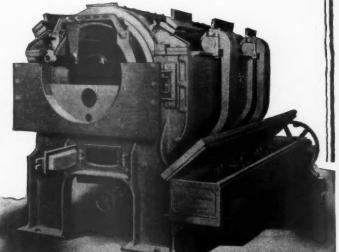
TO PAPER MILL MANAGER:

Here is a list-compare it with your mental picture of what you would consider "ideal" screening for your paper mill-

- Quick removal of dirt.
- Large capacity.
- Minimum power, vibration and
- 4. No possibility of lumps, etc., working into screened stock.
- 5. No pockets or dead spots in vat or cylinder.
- 6. Dependable lubrication.
- 7. No possibility of oil or grease getting into stock.
- Quick, visible washing up and oiling.
- 9. Screen plate slots always open.
- 10. Quick changing of screen plates.
- No shutdowns of paper machines due to screen repairs.

Or, to put it another way-

- (A) ability to produce clean stock continuously
- (B) quick changeover when wanted
- (C) reliable operation at low cost



Note enclosed and accessible main drive, shower pipe, washout door for cleaning.





Woodpulp Agents

We act as sales agents and distributors for the entire output of Sulphite and Kraft Producing Mills.

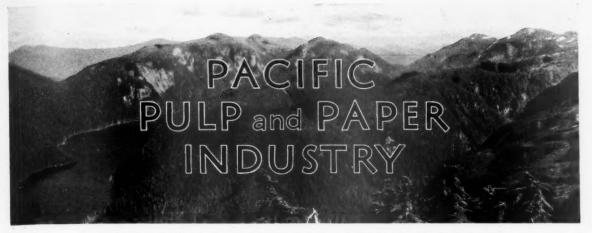
Paper Distributors

Mill agents and dealers for the distribution of all classes of paper in the Eastern markets.

BULKLEY, DUNTON & COMPANY

75-77 DUANE STREET

NEW YORK



A Pacific Coast publication for Producers, Converters and Distributors of Pulp, Paper and Board, published monthly on the 15th of each month by Miller Freeman at 71 Columbia St., Seattle, Wash. Subscription price, by the year, U. S. and Canada, \$4; other countries, \$5. Changes in advertising copy must be received by the publisher three weeks prior to the date of publication when proofs are desired.

Vol. 3

FEBRUARY, 1929

No. 2

Why Bother With Cornstalks?

The Pacific Coast Wastes Annually More Pulpwood Than the Entire United States Produces

BACK in the war years when "the farmer hauled another load away" to the market he received a roll of bills large enough to choke the proverbial ox. Prices for farm products were just dandy. The roll of bills became presently transferred into "all the conveniences of the city" and the old homestead was spruced up in a way hitherto unparalleled, with electric doo-dads extending almost to individual motor-drives on the barn door hinges.

The inflated credit caused by this corn belt splurge would have been quite all right had some one not rudely kicked the props from under before John Farmer really got to taking seriously the installments on the new bath tub and the player piano. The facts are, however, that the bubble was busted and for the past several years we have listened to "Those Agricultural Blues."

There are lots of votes down on the farm. Right now they are disgruntled votes, the kind that are highly important to the gentlemen down in Washington, D. C. Hence we find frequent reference to the word "relief" when those Washington gentlemen get to speaking of the farmer. So, when some enterprising individuals manufacture enough corn stalk pulp to make up a batch of corn stalk newsprint (with the help of about 35 per cent good old wood sulphite) and a number of daily papers in the corn belt are printed on this paper, including with the day's grist of news column after column about the new paper meaning the salvation of the farmer, etc., we are not to be surprised that some worthy senators seize upon these corn stalk editions to wave them in Congress and get in a little oratory practice.

In plainer English, the bulk of this corn stalk paper hubbub can be set down as a political palliative for the

"poor farmer" with an eye on the ballot box rather than on practical results.

Among other developments in Congress in the trail of corn stalk paper is a resolution introduced which proposes:

"That any American manufacturer of paper who manufactures news print paper containing at least 60 per centum or more of waste products of field crops produced on American farms (such as cornstalks, flax, wheat, rice or oat straw, cotton stems, or sugar-cane pulp) and who sells the paper so manufactured to any newspaper or other publisher in the United States at a price not exceeding \$40 per ton, shall be paid, from the Treasury of the United States, a bounty of 1 cent for each pound of paper so produced and sold."

You are privileged to do your own arithmetic.

It is not the purpose of the present discussion to argue the pros and cons of farm relief.

Neither is it the purpose to belittle corn stalk pulp as a contribution to the technical advancement of the pulp and paper industry. Commercial development is, however, a horse of a different hue. Welcome to corn stalk pulp as a new source of revenue for the farmer and a new supply for the industry, but let it stand alone without being nursed along with a bounty.

The Senate resolution referred to above seeks to accomplish a worthy two-fold purpose, namely, to encourage the use of wastes and thus afford industrial relief, and to put the United States on a self-sustaining basis with respect to paper supply.

The bounty idea connected with these purposes can be dismissed at once for just what it is—plain silly. The end results are possible of achievement right now without bounty. But with wood, not corn stalks.

At this point we return to the Pacific Coast and pick

(Turn to page 32)

Gummed Kraft Sealing Tape

Some things about its MANUFACTURE and USE

As told by ARTHUR B. GREEN

Manager Gumming Division, Western Waxed Paper Co., North Portland, Ore.

IN KEEPING with the growing population and intensified enterprise of the West, there has been established at North Portland, a new plant for making GUMMED KRAFT SEALING TAPE. Not only the growing population, but also the growing use of this

ARTHUR B. GREEN

commodity by the largest and most successful shippers and merchants, provides a most promising market to justify the comprehensive plans on which this plant has been laid out. In fact, it is believed that the economies of Pacific Coast production, and the efficiency of design in this particular plant, will be found of definite service even to other parts of the United States than the West Coast.

Gummed sealing tape, as a commodity, came on the market on a big scale, some 20 years ago . Dur-

ing those 20 years the Atlantic seaboard and the Central parts of the United States have been undergoing a very thorough development in the use of Kraft sealing tape for packaging. Tape has become the leading means of closing packages in those territories. The security of the package, the freedom from damage to the contents, neatness of the package, and the short time that it requires to close a package with tape, all recommend this as the modern way of enclosing merchandise, both for wholesale and retail distribution.

Kraft tape is normally sold in three classes.—First, the class that represents the biggest tonnage, is used for sealing packages, cartons, fibreboard containers, and the like. It comes in 35 pound and 60 pound basis weight of Kraft before gumming. In the lighter weight the tape ranges from ¾ in. to ½ in.—in the 60 lb. weight the widths range from 2 in. to 4in. Shipping rooms, wholesale houses, and retail merchants are the large users of this commodity. The second class is Gummed Kraft Tape, used for staying the corners of set-up paper boxes, normally in ¾ in. and ⅙ in. widths an important, though hidden service in the packaging of American goods. The service is important because, without it, the box would not remain in the shape of a box, and it is hidden because usually the set-up box is covered with some sort of ornamental liner.

The third class is on the lighter weights of Kraft, and is used in 1 in. width to assist in the making of

plywood. Plywood covers a number of varieties of laminated wood, or veneer lumber. Gummed Kraft Tape is very generally used on the high grades of veneer lumber where the surface veneer is of high grade hard woods, and the matching of the grain is important. After the veneer has been cut, an accurate edge is cut on it, and these edges are brought together so that the grain matches up. Two such sheets of wood, edge to edge, are run through a machine which fixes a length of Gummed Kraft Tape over the join. In this way the panel is held together in a continuous sheet until it is mounted on the core. Under the final operation where the surface of the veneer panel is finished, the tape is removed and we have the completed article. Considerable quantities of this are used in the great woodworking territories of the Pacific Northwest.

Because Gummed Kraft Tape has been manufactured almost entirely East of the Rocky Mountains, the people of the Pacific slope have not had as good an opportunity to become accustomed to its use as the people have in the Central and Eastern territories. Yet, there is every reason to believe that here—"Where the West begins"—the people will not be slow to take advantage of everything modern in the way of putting up their goods for shipment, or store sale. In undertaking to make, and distribute Gummed Kraft Tape the Western Waxed Paper Co. has shown its confidence in this people and the market that they form. Moreover, no pains or expense have been spared to make the new plant the most efficient that modern engineering can provide.

A New Division

Accordingly, last summer, a new building was erected adjacent to the existing building of the Western Waxed Paper Co., in North Portland, Oregon. The new building is 112 ft. x 240 ft.—it contains the offices of both the Gumming and Waxing Divisions of the company, also the shipping facilities of both divisions. This leaves something over 2/3 of the entire building for the Gumming operations alone.

The Gumming Machine is of entirely new design. The paper is carried from a parent roll and receives a coating of the Pacific slope have not had as good an opportunity the usual gumming machine. Then, instead of passing over and over through a spiral where it winds up at the center, the path of the paper in this new machine follows a line resembling a pair of eyeglasses. The paper travels in a series of curves always bending away from the coated side, and bringing nothing in contact with the coated side except violent blasts of hot air. The paper leaves the operator as its starts on this symmetrical path. At the end of the path it is back again to the position of the operator. In this way, every element in the operation of the gummer is under the eye of the



The new gumming machine recently installed in the Gumming Division of the Western Waxed Paper Co. embodies several manufacturing refinements. The machine will handle rolls up to 60 inches in width.

operator at all times. Within his reach also are located all of the controls of the machine. He can control his speed, his coating, his tension, as the paper enters upon the process. He can also control the drying, the cooling, and the rewinding from the same point.

In the older types of machine, is was impossible for one man to take care of the beginning and end of the

process at the same time.

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A further novelty in this machine is the provision made to avoid unnecessary strains on the paper during the drying operation. Instead of passing the paper over a series of carrying rolls, as in the former types of machines, the paper comes in contact with carriers which remain in contact, and do not move lengthwise of the paper, until they deliver the paper again to the rewinder.

During the tests for mechanical accuracy, when the machine was first completed, a coil of 1½"-35 lb. tape was run around the machine following exactly the path that the paper was intended to follow. When the end came back to the starting point, it was joined to the other end forming a tight belt; this ran smoothly at speeds almost 50% higher than designed speeds, without wrinkling or cracking at any point. Moreover, this narrow strip maintained such close alignment that it would not move to the right or left, except as it might be guided. If it was guided from one side to the other it would straighten up and maintain a straight path in whatever position it was left.

In accordance with the indications of that test, the paper now runs through the machine and winds up on

the rewinder into a gummed roll substantially as true as the mill roll from which the paper came.

Coupled with the machine is a large blower capable of throwing 36,000 cubic feet per minute of air at high velocity and heaters are incorporated capable of maintaining this air at 200° F. These violent jets of hot air come against the paper at frequent intervals, and at very high velocity directed upon the gummed side. As this air takes up the moisture from the coat of adhesive on the paper and becomes nearly saturated after some three or four passes through the system, it is automatically discharged and fresh air replaces it.

As this hot air comes from the nozzles directed against the paper, it is set free in an insulated chamber. This chamber is built up of a series of panels with a double wall of galvanized sheet iron. There is a 2" space between the two walls of each panel filled with corrugated asbestos board. The result is that heat losses through the machine are exceedingly small. While the temperature on the inside is close to the boiling point of water, a man may hold the back of his hand against the outside of this chamber with entire comfort.

A coil of tape looks so small, and so simple, that one is apt to gain the impression that this can be made to advantage in an attic or a cellar with very little machinery. But, the economical way to produce it is to put the adhesive on in a wide roll. When this wide roll is rewound in the form of a gummed roll, it is ready to be converted into small coils of tape. That operation is done on a slitting and rewinding machine. In the

(Turn to page 30)

Rainier Adding New Boiler Plant

The Rainier Pulp & Paper Co. at Shelton, Wash., is now building a new boiler house and installing additional boiler capacity to meet the mill requirements. The mill, which has a daily capacity of 135 tons of bleached sulphite pulp, began production in the summer of 1927. Its original steam and power requirements were supplied by the joint power plant erected in conjunction with the two adjoining saw mills which also supply a considerable amount of pulp wood. Recently a new bleeder-type steam turbine was installed at the Rainier mill and the boiler now being added will further augment the steam and power resources.

The new unit is being constructed by Chris Kuppler's Sons, contractors who built the original mill. W. R. Kuppler is now on the ground in charge of construction. The unit will be completed in about two months.

Galloway Visits San Francisco

A. B. Galloway, sales manager of the Oregon Pulp & Paper Co. of Salem, Ore., was a San Francisco visitor in January.

Crown Zellerbach Offers New Preferred Issue

Sixty thousand shares of Crown Zellerbach Corporation preferred stock \$6 dividend convertible series B were offered late in January at \$95 per share. The shares are non-callable under Nevada laws, in opinion of counsel, for a period of three years from issuance. The shares are without par value, preferred as to assets and cumulative dividends and redeemable at $102\frac{1}{2}$ and accumulated dividends. These shares carry the option of converting prior to December 31, 1933, to three shares of common.

The Crown Zellerbach Corporation, formed by the recent merger of the Zellerbach Corporation and the Crown Willamette Paper Co., two of the leading Coast paper interests, is rated now as the second largest paper manufacturer in the United States, with assets of about \$105,000,000.

A statement of corporation properties is made as follows:

"Properties include fee ownership and timber licenses and pulp leases of more than ten billion feet of timber in the United States and Canada; water power developments owned and leased of 63,600 h.p. capacity; hydroelectric power development of a present installed capacity of 25,500 k.w. and long-term contracts for 14,200 k.w. additional; pulp mills and paper mills having an annual capacity of 465,000 tons of paper; partly owned paper and board mills having an annual capacity of 186,000 tons of box board and box board products; converting plants; wholesale divisions."

Consolidated earnings of the corporation and subsidiary companies, for each of the last four fiscal years ended April 30, including earnings of the Crown Willamette Paper Co. for the entire period adjusted to the fiscal years basis have been as shown below:

Paraffine Companies In Stronger Position

Assets of the Paraffine Companies, Inc., totaled \$16. 214,679.44 as of December 31, 1928, as compared with \$15,736,134.79 on June 30, 1928, which is a gain of \$478,544.65 for the last six months of the year.

Investments in stocks of other companies totaled \$8. 437,567.14 as of the close of the year, compared with \$7,905,038.18, which is an increase of \$532,528.96.

Capital assets made an increase of \$7,491.04 over the total for June 30, 1928 of \$3,817,286.80, making a total as of the close of the year of \$3,824,777.84.

Current assets totaled \$3,767,580.07 as compared with current liabilities of \$557,059.85 as of the close of the year, which is a ratio of 7 to 1, as compared to a ratio as of June 30, 1928 of 41/2 to 1. This is an improvement in current position of about 50% during the six months period.

Earnings in the last six months of 1928 showed a good increase over those of the first six months, being, for the last half, at the annual price of \$6.58 per share

of present outstanding stock.

A financial writer in reviewing Parassine states that "this company is now enjoying one of the most satisfactory positions from a financial and earnings standpoint that it has held for some time. It has retired its bonded indebtedness and outstanding preferred stock, and has no liabilities other than current liabilities, common stock surplus and reserve for roofing guarantees. Economics effected and continuation of a policy of conservative expansion are being reflected by ever increasing earnings. A progressive policy is being pursued in developing new products and improving those already on the market, which is also resulting in increased sales and is keeping the company a step ahead of the times."

The board and container plants of Paraffine were merged with similar properties of the National Paper Products Co., a Zellerbach Corporation subsidiary, in 1928 to form the present dominating Fibreboard Products Co., ownership of which now lies about equally divided between Zellerbach and Paraffine.

Much of Paraffine's success is attributed to its aggressive sales policy, particularly in patent roofings. It has carried the fight in these products and introduced them widely even in towns where the wooden shingle industry was concentrated.

Report No Findings of Pulp Dumping

After an investigation in Finland, Czechoslovakia and Estonia of the purchase prices, foreign market values and related matters involved in the question of dumping of chemical wood pulp from those countries, the U.S. Bureau of Customs has decided that there is no justification for the issuance of findings of dumpings.

A similar investigation being conducted by the Bureau in regard to importations from Sweden and Germany

has not yet been completed.

	25	1926	1927	1928	Average
Net Profits after depreciation, depletion, interest and Federal and Canadian income taxes \$10,336	5,089	\$10,706,036	\$11,267,836	\$11,522,479	\$10,958,110
Net Profits after depreciation, depletion, interest and Federal and Canadian income taxes and after allowing for minority interests in Pacific Mills,					
Limited, based upon holdings as of April 30, for the years shown 5,820 Balance after deducting dividends on preferred stocks of subsidiaries out-	0,704	5,561,846	5,861,985	5,790,950	5,713,874
standing as of October 31, 1928	5,176	3,877,319	3,997,458	4,106,432	4,020,347
Annual dividend requirement on Convertible Preferred Stock and Preference Stock outstanding as of October 31, 1928, as now constituted including the issue of Series Preference Stock					#1 583 670

The balance of net profits of the Corporation and subsidiary companies for the first half of the current fiscal year to October 31, 1928, based on book figures, after the payment of dividends on preferred stocks of subsidiaries, was \$2,757,259 or at the annual rate of \$5,514,519 which is over 3.5 times the annual dividend requirements of the preferred and preference stocks outstanding, including this issue.

After payment of preferred and preference stock dividends, the balance available for the common stock, on the basis of earnings for the six months to October 31, 1928, would be at the annual rate of \$3,930,849, equivalent to over \$2 per share.

New Pulp Mill

Bleached Sulphite Plant to be Built on Oregon Coast

TREET rumors current for several months that the principals of the Winchester Bay Lumber Co., with offices in Portland, were developing plans to establish a 60-ton bleached sulphite pulp mill at Reedsport, Oregon, were confirmed last month by Russell J. Hubbard, vice-president of the company. Mr. Hubbard recently appeared before a special meeting of the Reedsport city council to ask for cooperation in obtaining sufficient water for the project.

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In connection with Mr. Hubbard's request it was learned that C. C. Hockley, a Portland pulp and paper engineer, had completed a favorable survey of the district's pulp resources, operating costs and water supply.

Mr. Hubbard states that it is the present plan to organize a new company for the pulp mill, although the stockholders in this new company would be about the same as those of the present Winchester Bay Lumber Co.

Financing Completed

Financing of the pulp mill project was completed several months ago and was essentially an internal proposition with funds coming from the sawmill owners. Negotiations have been carried on with several concerns in the East, however, who have wanted to take an interest in the pulp mill and absorb the output. Should any arrangements be completed in this direction, Mr. Hubbard states, a part interest in the pulp mill would probably be held in the East.

An Eastern superintendent is to be placed in charge of the new pulp mill when completed, but the name of this man has not yet been disclosed.

Construction on the pulp mill will probably start about June 1. A site adjoining the company's sawmill will be utilized. Steam and electrical power will be furnished from equipment already installed.

Water is to be supplied from a proposed reservoir to be built midway between Clear Lake and Reedsport, according to a tentative agreement between Mr. Hubbard and the city council. It is proposed to use a part of the water system of the city of Reedsport so that duplication of the pipe lines leading from the lake section to the city will not be necessary. The reservoir would also insure a reserve water supply for the city, it was said.

Will Use Waste

The pulp, which is to be made from Sitka spruce and western hemlock sawmill waste, is to be a high-grade bleached product, and a tentative contract with an Eastern broker to handle a large share of the product is already under consideration. No difficulty in disposing of the remainder of the mill's output is anticipated, Mr. Hubbard said.

The location, which allows for the economical use of the sawmill's waste and lower grades of logs was reported by Mr. Hockley to be particularly advantageous. Reedsport is situated in Douglas County, Oregon, on Winchester Bay, where the Umpqua River discharges into the Pacific Ocean. Chemical supplies for the mill

can be laid down at a cost favorable with other Oregon plants, and shipping will not present a serious problem, Mr. Hubbard said.

The Winchester Bay Lumber Co., of which John Kiernan is president, has been in almost continuous operation for the past ten years, and has made an enviable record in the annals of Reedsport industry. At present the operations are confined exclusively to the cutting of spruce and hemlock lumber. The company has large timber holdings within a short distance of the mill, which insures a permanent supply of pulp wood.

Mr. Hubbard states: "The idea of a pulp mill to operate in conjunction with our sawmill has been under consideration for some years and we feel at the present time we would be justified in the construction of the pulp mill as we have enough wood available in this territory to operate a 50 or 60-ton plant."

Bates Bag Faces Injunction Suit

Charged with executing and carrying out contracts which substantially lessen competition and tend to create a monoply in interstate commerce, the Bates Valve Bag Corp., of Chicago, is named defendant in an injunction suit filed in January at Wilmington, Delaware, in the United States District Court by the United States Department of Justice. The petition, after setting out in considerable detail the methods under which Bates bag machines are leased and contracts made, prays:

1. That a writ of subpoena directed to Bates Co., commanding it to appear and answer, but not under oath (answer under oath being hereby waived), the allegations of this petition, and to abide by and perform such orders and decrees as the court may make in the premises.

And, further, that the court order, adjudge and decree as follows:

2. That the Bates Co., by the acts and things hereinabove alleged, has been, and, is, substantially lessening competition and creating a monopoly in valve bags in violation of the Clayton Act.

3. That the contracts, agreements and arrangements between Bates Co. and users of Bates machines, so far as they restrain the user with regard to the purchase and use of valve bags, are null and void.

4. That the aforesaid contracts, agreements and arrangements between Bates Co. and the licensed bag makers, so far as they require the licensed bag makers to deal only with the Bates Co. or nominees of Bates Co., are null and void.

5. That the defendant, and its agents, be perpetually enjoined from doing any act in pursuance of, or for the purpose of carrying out or executing the above described contracts, agreements and arrangements, and from entering into any similar contracts, agreements and arrangements in restraint of interstate trade and commerce and competition in valve bags.

6. That the plaintiff have such other, further and general relief as the nature of the case may require and the court may deem proper.

New Mill Announcement Expected

Plans for a large combination lumber, pulp and paper mill in southern Washington in the Columbia River district are said to be nearing completion and an announcement may be made in March. It is expected that the completed mill will be unlike any other now in operation on the Coast. Good progress is reported. The announcement is expected to reveal a combination of Eastern and Western capital and to bring out names well known to the paper industry.

Tumwater May Resume Production

Reports from Tumwater, Washington, indicate that the Tumwater Paper Mills will probably resume production shortly. At the time of this writing, however, an official announcement could not be obtained and reorganization plans on which the company officers have been working for some time were reported as progressing nicely but still incomplete.

Negotiations have been carried on with some companies looking to outlets for the mill output. It is understood that these negotiations have been carried on with both Eastern and Western agencies.

The mill is still in the hands of the original stockholders, it is reported. President T. Osmund has resigned from that position, however, although remaining a director and stockholder.

P. J. Lamoureux is now at Tumwater in the capacity of secretary and general manager. He recently resigned as general manager of the Oregon Pulp & Paper Co. at Salem, Ore., coming to that mill from the East, where he had been identified with a number of mills. He has been in the paper manufacturing business all his life.

It is believed that with the perfecting of new sales arrangements that a bond issue will be offered, following which some additions to the mill to secure greater operating economies will be effected.

The Tumwater mill has a daily capacity of 40 tons of sulphite papers. It has a small groundwood mill of its own and one fourdrinier. First production began late in 1927.

Gummed Kraft Sealing Tape

(Continued from page 27)
Gumming Division of the Western Waxed Paper Co., there are two such machines; one by Cameron Machine Co. of Brooklyn, New York, incorporating their well known score cut principle; the other incorporates the older principle of shear cut, and combining it with extreme precision and accuracy. It requires the utmost production from these two machines combined to absorb the amount of material that the gumming machine easily produces.

One very distinct novelty is a water-mark placed in the paper, at the paper mill, before it is delivered to the Gumming Plant. This is in the form of an underscored "W". It is believed to be the only means of identification for Gummed Tape, which appears frequently through-out the length of the narrowest tape. It is thought that this leaves no room for mistake, and positively identifies the product with its maker. The "W" stands as a pledge that nothing except of the highest quality is put upon the market. There can be no question as to whose Gummed Tape is under discussion after a bit of it has been taken off from a coil. So far as we know, this is the only water-marked Gummed Kraft Tape in existence.

Grays Harbor Interest Is Aroused

New interest in pulp and paper affairs sprang up in the Grays Harbor, Wash., region during the latter days of January when rumors that a large mill might be constructed in Aberdeen within a few months, went the rounds, and when L. E. VanWinkle, secretary of the Pacific States Pulp & Paper Co. announced that the company still intends to build a pulp mill on its site at Junction City on the Chehalis River, purchased more than a year ago.

According to Mr. VanWinkle the company's recently announced plans to construct a pulp mill at Priest River, Idaho, will in no way retard development on Grays Harbor. His complete statement was as follows:

"It has come to the notice of our company that some press notices of the Priest River project intimates that we will abandon the Aberdeen development. This is erroneous and not authorized by us, and there is no intention whatever on the part of our officers to abandon the Aberdeen project. We do not wish the people of Grays Harbor or anyone else to get such an impression.

"The carrying out of our plans at Priest River will not interfere with the Aberdeen project further than possibly a little delay in starting. We have a valuable site on Grays Harbor and it is the intention of this company to build a pulp mill upon it.'

Previous to this announcement, Harbor citizens had about abandoned the idea that this company would

build there.

The West Lumber & Pulp Co., another firm that has announced its intention to build a pulp mill on Grays Harbor, is still working on the project, but would give no more definite announcement other than it expected to start construction in the spring.

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Rumors persist in Grays Harbor that the Zellerbach or affiliated interests will build another mill in the Harbor district. These rumors lack confirmation from Zellerbach headquarters in San Francisco, however.

In spite of a feeling of alarm by many residents of Aberdeen that the city's new \$1,600,000 industrial water system, now about finished, will deliver to the city water which cannot be sold, a general feeling of optimism concerning the plant reigns. A group of men, anxious to put the system through, guaranteed \$1,000 each annually for the upkeep of the plant, in the event that the water could not be sold and the plant became a burden on the city. This group, it is understood, is working vigorously in an attempt to attract pulp and paper factories to Grays Harbor and, while no definite announcements have been made, claim to have met with some success. In the last analysis, if they cannot get a mill to use at least part of the water, they may form a local company and put up a small sulphite pulp mill in Aberdeen themselves.

News Print Side Runs Are Dutiable

Newspaper "side runs" are dutiable at 1/4 cent per pound and 10 per cent ad valorem as printing paper, the United States Court of Customs Appeals has held in the case of the Crown Willamette Paper Co. against the United States. In an opinion handed down by A3sociate Judge Bland of the Court, it is pointed out that printing paper known as "side runs" cut from standard newsprint paper, but too small for the printing of newspapers, was assessed at ½ cent per pound and 10 per cent ad valorem as printing paper. The importer protested that it was properly free of duty as standard newsprint paper. The United States Customs Court overruled the protest of the importer and their judgment is affirmed by the decision of the higher court.

Employes Pay High Tribute to Oberdorfer

The following resolution which was presented to Max Oberdorfer, general manager of the St. Helens Pulp & Paper Co., at St. Helens, Ore., by representatives of the mill's employes speaks for itself regarding the relations between management and personnel at St. Helens. The text follows:

To the management of the St. Helens Pulp and Paper Company, St. Helens, Oregon:

Whereas, there has been presented to the employes of the St. Helens Pulp and Paper Company since it has been in operation an annual donation by the management in the form of individual wages at the most appropriate and propitious time of the year, viz., Christmas, when such gifts are most appreciated and welcomed, and

Whereas these contributions have been given without stint or favor in the true spirit of the season and in recognition of high ideals that are not only conductive of the greatest good, but that have added much to the material value of the benefits conveyed and thus doubly brightened the homes and firesides of employes and their families as well as the community, and promoted the good will and friendship of all concerned and thereby developing a real glow to the Yule-tide spirit, and

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Whereas, there have been considered from time to time other considerations and benefits for the welfare of the employes and their dependents and recently there has been inaugurated a plan of insurance for the protection of all employes, which will prove very advantageous, and including such features as permanent and total disability as may accrue in or out of the regular line of employment, the cost of which a substantial part is borne by the company purely voluntarily, and which again not only exemplifies a fine co-operative spirit that has been engendered by the progressive attitude of the management, but which will in effect elevate the social and intellectual status of employes generally; therefore, be it

Resolved, that we, the employes of the St. Helens Pulp and Paper Company who are unable individually to convey to the officials of the company our appreciation and esteem for the high character and conduct shown not only in the management of the business which has insured continuous and steady employment to several hundred men, but also in all their actions and dealings, take this occasion, through our representative foreman, to reciprocate the excellent spirit that has been manifested and to express our pleasure and gratitude for the service and the institution that has been so magnificently dedicated.

PHILIP BUCKLEIN, TOM MATHISON, T. F. ZIELASKOWSKI, GEO. GORMAN, LEO BAKER, E. I. DAY, J. E. CATER, E. W. LeROY, H. WOOLEVER, G. E. EMIGH, ORVAL D. COLLINS, GEORGE MARTIN,

Installing Two New Grinders at Longview

Two three-pocket grinders for the new ground wood mill of the Longview Fibre Company's \$3,000,000 plant at Longview, Wash., are now being installed, and are expected to be in operation beginning about March 15. The frame building to house the ground wood mill, located just north of the main plant building, is completed. The grinders will be operated by a General Electric motor of 1,650 horsepower. Power to operate the motor will come from the plant's existing power system, and the necessary tap is now being made. The ground wood will replace about 20 tons daily of newspaper waste which is now being used in the approximately 100 tons of fibreboard produced daily.

Paterson Returns to Oregon

A. M. Paterson, assistant office manager of West Linn plant of Crown Willamette Paper Co., has recovered sufficiently to return to Oregon. Mr. Paterson had the misfortune last summer in California to be crashed into by an airplane, his young son being killed.

Visual progress on the new sulphite pulp mill of the Sitka Spruce Pulp & Paper Co. at Empire, Ore.



December 27, 1928



January 17, 1929



January 20, 1929

Rapid Progress at Sitka Spruce Mill

Construction on the new 50-ton sulphite mill of the Sitka Spruce Pulp & Paper Co., at Empire, on the Oregon Coast, is proceeding rapidly. The main structures are now up and machinery installation is going on in some parts of the mill. The accompanying illustrations bespeak better than words the progress that is being made.

Steel for the two 16x52-foot digesters manufactured by the Willamette Iron & Steel Works, of Portland, has been shipped to the mill site for erection.

The mill is backed by C. McC. Johnson, a prominent Oregon lumberman. J. B. Wilt, one of the Pacific Coast's best known sulphite men, is supervising construction of the mill.

Oberdorfer Is Elected Bank Director

Max Oberdorfer, general manager of the St. Helens Pulp & Paper Co. at St. Helens, Ore., was elected a director of the First National Bank of St. Helens at the annual bank meeting held on January 8. Mr. Oberdorfer recently acquired an interest in the bank.

Why Bother With Corn Stalks?

(Continued from page 25)

up the thread of the narrative with that subject, familiar to some, unfamiliar to others, yet potently existant, of "woods waste" and "sawmill waste."

Ever since the fabled Paul Bunyan and his big blue ox, Babe, trekked into the Pacific Coast forests after logging off Wisconsin, Michigan and other Eastern states, a wide variety of estimates concerning the amount of wood waste has been offered to, or foisted upon, the public. These guesses-for they were entitled to no more exacting description-ranged all the way from absolute zero up. It remained for the U. S. Forest Service, however, to take a scale into the woods and actually do the measuring.

Is Anything Being Done About This Waste?

The answer is in the affirmative. In the past three years the pulp and paper industry on the Pacific Coast has shown a tremendous increase. Many new mills have been built and other mills have added to their capacities. In many instances the pulp mills have tied up directly with saw mills and the waste formerly going to the burners is now going into pulp. At the same time steady progress is being made in utilizing the waste in the woods, either by cleaning up the pulpwood before or after the timber logger, or by encouraging closer logging on the part of the logger himself. The pulp mills are opening new markets for logs that could not be taken out profit-

The present development is only a start. As more mills are constructed on the Pacific Coast the amount of waste will be lessened steadily, for profitable utilization will become possible, governed by the economics of supply and demand. More mills are coming. This is no empty statement. At this moment there is in prospect nearly a score of new developments that bid well to materialize within a few months. Many projects are expected to reveal extensions of Eastern mills into the Pacific Coast territory. And in this group are included no rumors, no unvarnished stock promotions, and no projects on which development is fairly certain eventually, but still fairly remote in the future.

In the space of two and one-half years the Forest

Service measured 150 sample acre plots, carefully chosen to be as average as possible. These plots were selected in 24 different logging operations scattered over the Douglas Fir region in Washington and Oregon. After the loggers had been over the ground the actual amount of sound wood in each plot was painstakingly

The final results show that there is being wasted in the Douglas fir region in the two states of Washington and Oregon alone 6,448,000 cords ANNUALLY. This figure includes only sound wood of cordwood size or

Quite an impressive figure in itself, but much more impressive when set down beside the total pulpwood production in the entire United States which, in 1927, amounted to only 4,313,403 cords.

And in the face of these figures a bounty of \$20 per

ton on corn stalk news print is asked!

To be fair, let it be said that of the total 6,448,000 cords about 2,500,000 cords represents the best pulpwoods, namely, Western Hemlock, White Fir and Sitka Spruce. The balance of Douglas Fir and Red Cedar is still relatively unimportant for pulp, but on the upgrade nevertheless.

The 1926 federal government figures show that the average price of pulp wood in Washington was \$9.08 per cord. In California and Oregon the price was

\$11.40. Striking an average figure of \$10 per cord, and considering only the annual waste of the 2,500,000 cords of the leading pulp species reveals an annual waste of \$25,000,000. Such a waste is equivalent to throwing away the interest-at 6%-on an investment of more than \$400,000,000.

One may add to this the annual loss of sawmill waste in this same region sufficient to manufacture a theoreti.

cal 2,000,000 tons of pulp annually.

There is a temptation, in computing this wood loss, to strike it off as just so much ANNUAL loss. The facts are, however, sadly otherwise. These trees, moved down like so many weeds and left to rot or burn, have required 30, 40, 50 or even 100 or more years to mature. All the more reason why attention should be directed to the forest resources first.

There will be a new crop of corn stalks next year. A new crop every year. But trees wasted today will not

be with us again for at least 30 years.

Grays Harbor Shipping Pulp East

The sulphite pulp mill of the Grays Harbor Pulp & Paper Co. at Hoquiam is now turning out in the neighborhood of 150 tons of bleached sulphite pulp in each 24 hours and during the latter part of 1928 and the first days of 1929 has shipped to the New England paper producing districts, to California and to the Orient several thousand tons of pulp. According to officials the pulp from this mill, which utilizes the pulp woods of the Olympic peninsula of Southwest Washington, will ultimately be used in producing bond and other fine papers, when the paper mill unit now under construction, is completed.

The pulp mill, it is estimated, will show earnings of more than \$650,000 during 1929. It is held that the paper mill will increase the net earnings by at least \$350,000, bringing the eventual revenue of the two plants of the company to more than \$1,000,000 per year. The mill is using much material from Grays Harbor mills, which at this time last year, was being

burned.

Hawley's Production Climbs

Paper production at Hawley Pulp & Paper Company's plant at Oregon City, has risen to higher levels. The new 234-inch machine has attained a speed of well over 900 feet per minute, producing some 130 tons of finished paper, the major part of which is being shipped to Portland for the Oregonian and Journal presses. Hawley's No. 1 machine is on a run of heavy wrapping. producing fully 50 tons per day. Machines No. 2 and No. 3 are running on light sulphite papers for which the firm has established a wide reputation. A total of 250 tons per day of finished product is being produced. The sulphite plant is standing up well to the increased demands on it. The company has just finished a new warehouse between Third and Fourth Street, and the stub end of Third Street, so long a bone of contention, has been fenced off for further expansion.

Seek New Forest Roads

The Quinault Commercial Club of Southwest Wash. ington, which recently sponsored a movement to secure construction of a Brinnon-Lake Quinault road as a fireprevention measure, is making a determined effort to secure official action on the project this year. road would enable forest fire fighters to move equipment and men into a blaze with rapidity in an area now almost inaccessible, covered with valuable timber.

Paper Bags

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ashcure firet to The uipnow A New Factory at Vancouver, Wash.

EPARTING from their usual custom of beginning new units with a small quota and adding new lines as demand increases, the Union Bag & Paper Corp. are installing in their new bag factory, just completed at Vancouver, Wash., a varied line of equipment to enable a quantity production of Union Bag products from the start.

The new bag factory has an ideal location, a few city blocks removed from the main business section of Vancouver on the premises of the Columbia River Paper Mills, operated by the Leadbetter interests. Oceangoing ships find deep water dockage at the very doors of the mills and low cost, high-speed service to mountain states is provided by sidings which give access to trunk railroad systems. The mills on whose property the plant is erected will provide the kraft paper.

The regular lines of Union grocery bags will be the first concern of the plant. The Automatic shape will include the Tiger, Lion and Antelope grades, in the company's "Not a Seam" perfection of formation. The Squares will start with Banner, Hemp and Acme. There will also be an export grade, "Havanna Standard," for Costa Rican trade, going thither by coastal steamers. Besides the standard lines, odd bags in the auto, square, flat and satchel bottom shapes will be represented—elephant, sugar, auto, candy, notion, millinery, banana, nail bags, flour and poultry sacks are among these.

The making of the Union factory lines of Duplex coffee bags and Duplex flour sacks is also included in the



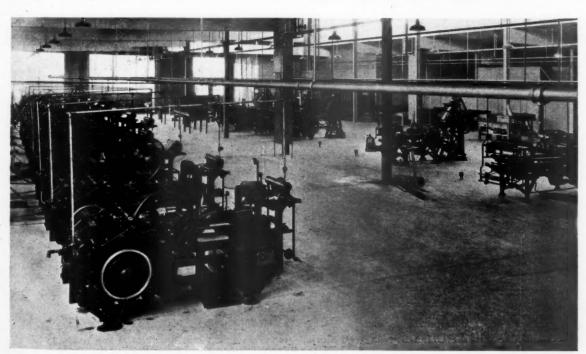
An exterior view of the new factory. The buildings of the Columbia River Paper Mills are immediately beyond and adjacent to the bag factory.

company's plans. Western merchants have long been heavy buyers of these goods and the completion of the new Vancouver factory will enable these dealers to get them with much the same freshness and promptness as the dealers in New York and Pennsylvania.

The above equipment assumes a varied line of printing facilities and the Union people are meeting these expectations with a number of their exclusive rotary suction and web presses for one, two and three-color printings.

printings.

Mr. W. W. Griffith, who has held responsible positions in both the operating and sales ends of the Union Bag & Paper Corp., will function as business manager of all the corporation's interests on the Pacific slope, being resident manager of the new 120-ton sulphate pulp mill at Tacoma and having in charge also the Vancouver factory and the sales force. G. S. Brenzel, formerly connected with Union's factory at Kaukauna, Wisconsin, is resident manager at Vancouver, and V. H. Murchie, formerly superintendent at Kaukauna, Wisc, is general superintendent at Vancouver.



Showing the machine installation in the new bag factory of the Union Bag & Paper Corporation at Vancouver, Wash.

Crown Zellerbach To Have New Offices

General offices of the Crown Zellerbach Corporation and two of its subsidiary companies are to be established within the year in what was the Security Building, San Francisco, which was purchased in January by the corporation and which is to be remodeled and enlarged.

The structure is now known as the Crown Zellerbach Building and it is to house, in addition to the corporation headquarters, the sales office of the Crown-Willamette Paper Co. and the San Francisco sales office of the National Paper Products Co.

Crown Willamette is to give up its present offices at 248 Battery Street. It is announced that the executive offices of the Zellerbach Paper Co. will remain at 534 Battery Street, and Fibreboard Products, Inc., will continue to occupy its offices in the Russ Building.

Each of these companies operates independently on policies established by the executive offices of the Crown Zellerbach Corporation.

Practically all the high executives of the Crown Zellerbach Corporation and its affiliated and subsidiary companies will occupy offices in the new location. This list includes Isadore Zellerbach, president of the corporation; Louis Bloch, chairman of the board; M. R. Higgins, chairman of the executive committee; E. M. Mills, A. B. Martin and J. D. Zellerbach, executive vice-presidents; Harold L. Zellerbach, vice-president; D. J. Goldsmith, secretary; S. Sonnenberg, treasurer; R. A. McDonald, general sales manager of the Crown-Willamette, and D. J. Arms, San Francisco sales manager of the National Paper Products Co.

Built in 1908, the Crown Zellerbach Building is close to the heart of San Francisco's financial district, being located at 343 Sansome Street, between California and Sacramento streets. The structure is eight stories in height and contains more than 50,000 square feet of floor space.

Plans have been drawn for extensive alterations, which will make the structure one of the most modern in San Francisco. Additional stories are to be added, high speed elevators installed, a spacious lobby is to be built and elaborate offices constructed.

Details of the changes were announced by Eugene A. Breyman, manager of the operating department of the Zellerbach Paper Co.

The Carmen Johnson Building, a three-story and basement business structure at Sansome and Sacramento Streets, San Francisco, was purchased early in February by I. Zellerbach, head of the Crown Zellerbach Corporation, and associates. Improvements are contemplated for some time in the future. This was announced as a private deal by Mr. Zellerbach, in which the company is not involved. The Carmen Johnson building is across the street from the Security Building, which was purchased last month by the Crown Zellerbach Corporation for use as headquarters.

Hockley Wins Engineering Honor

C. C. Hockley, consulting engineer, was elected vicepresident of the Portland section American Society of Civil Engineers at its annual meeting last month at the University Club, Portland. Mr. Hockley, prior to establishing his own consulting offices in Portland, was an engineer with the Union Bag & Paper Corp., engaged on some of that company's major mill construction in the East.

Edwardes Goes to Forest Products Laboratory

Vance P. Edwardes, associated for the past 18 months with B. T. McBain, Portland pulp and paper specialist, has taken a leave of absence to take charge of the school for sulphite superintendents at U. S. Forest Products Laboratories, Madison, Wis. The school opened early in February and will close in June.

Mr. Edwardes, who had charge of these classes when they were established several years ago, is considered one of the best informed sulphite men in the country. He is a member of the Superintendents' Association and also the Technical Association of the Pulp and Paper Industry. For several months past he has made his home at Astoria, where he has been doing work in connection with the proposed Northwestern Pulp & Paper Co., of which he is to be general superintendent and mill manager when the plant is completed.

He is perhaps one of the best known sulphite men in the industry, having filled a number of responsible positions since his initiation into the industry fifteen years ago at the old Willamette Pulp & Paper Co. plant at Oregon City. Besides doing considerable research work in the meantime, Mr. Edwardes was superintendent for three years of the largest Mitscherlich sulphite pulp mill in America at Interlake, Appleton, Wisconsin, returning several months later to take charge of the commercial contact work of the pulp and paper section of Forest Products Laboratory. Mr. Edwardes plans to return to the Pacific Coast sometime next summer, it is understood.

Off for New York Paper Convention

Ready to meet blase Gotham on its own terms—or rather, in its own garb—Harold L. Zellerbach, assistant to the president of the Zellerbach Paper Co., left San Francisco January 26 by steamer to attend the 1929 convention of the National Paper Trade Association at New York February 18-20. On the day he left Mr. Zellerbach gave the Zellerbach staff at San Francisco a treat by appearing in new spats, a cane, and, of course, a New York black derby.

"Harold is ready for any emergency. He believes in preparedness," commented Rollie Ayres, advertising director of the Zellerbach Co.

Othen San Franciscans who intend to attend the national paper trade convention are Louis A. Colton, director of purchases of the Zellerbach Paper Co., and R. A. McDonald and E. A. Hall, Jr., of the Crown Willamette Paper Co.

Ingram Now Handles Fine Papers Also

Donald Ingram of Ingram & Co., Los Angeles, states that his company now is handling fine papers as well as coarse papers and will handle the products of the Collins Manufacturing line, and those of the Howard Paper Co. The Ingram company has been handling coarse paper for seven years. Ray Clapp, formerly with the Pacific Paper & Envelope Corp., Los Angeles, is now with the Ingram company in the sales department of fine papers.

Stockton on Eastern Trip

Ronald P. Stockton, Vancouver, B. C., who has been representing the legal interests of the Vancouver Kraft Co. Ltd., in recent negotiations for extension of the company's Port Mellon mills, is visiting eastern Canada.



Architectural beauty as well as manufacturing efficiency has been built into the new plant of the Hooker Electrochemical Company at Tacoma. This view was taken shortly before production began.

Chemicals for the Industry

New \$1,500,000 Hooker Plant at Tacoma Built to Serve a Growing Pacific Coast Market

HE tideflats at Tacoma, Washington, have, in their raw state, certainly no claim to beauty. Acres of mud and driftwood, and a horde of seagulls, that would do for a description. But far-seeing men, with a commercial eye, saw also in this desolate picture the deep sea harbor, the tremendous log basin, the water power unharnessed in the hills. These they saw, and in a few short decades have caused the building on these Tacoma tideflats "the lumber capital of the world."

In the past year pulp and paper has settled down on the Tacoma tideflats to stay, and with it is coming those

industries allied with pulp and paper.

This month the Hooker Electrochemical Co. completed and put into production a chemical plant designed principally to serve the growing pulp and paper industry of the Pacific Coast. As the Hooker people state it, Tacoma was finally selected as a site for their Pacific Coast unit because of "favorable land prices, convenient shipping facilities, satisfactory power rates and similar items. Inasmuch as one of the main products, liquid chlorine, is mainly consumed by the manufacturers of pulp and paper a location which was central from a distributing point of view became essential."

The Tacoma plant was completed in slightly more than five months, the Austin Co. handling the general contract. Every detail of the plant was studied with care, and today it represents not only the "last word" in equipment and manufacturing economies, but incorporates also architectural beauty seldom found in a commercial establishment. At Tacoma the expert knowledge developed by the company at its Niagara Falls, N. Y., plant in the past 25 years has been built in.

With 35 feet of salt water at its own docks, and with rail connections, the Hooker plant has ample shipping facilities. Salt, a principal material, can be unloaded

direct from the steamers, coming from California, Louisiana, New York, Spain, Italy or China.

Electric power, the other essential raw material, is supplied by the City of Tacoma's municipal plant at a favorable rate. Fresh water requirements are supplied by Tacoma's recently completed industrial main.

The plant has an initial capacity of 30 tons of 76 per cent caustic soda per day and 26 tons of cell chlorine. Electric power is received as alternating current at 13,000 volts, 4000 volts and 110 volts. The 13,000 volt current is stepped down by air cooled transformers to approximately 350 volts and is then changed to direct current by the use of Westinghouse rotary converters. Each rotary convertor has a capacity of about 2000 h.p. and supplies the necessary electricity for the decomposition of the brine solution in the cells.

The Townsend cells are erected in a building about 350 feet long, which is immediately adjacent to the power station containing the rotary convertors. In the cell house are automatic and remote control switches by which the rotary convertors are operated so that in the power station no attendance is required.

A considerable quantity of steam is utilized in the evaporation of the caustic liquor and in other process work throughout the plant. This steam is supplied by two boilers fired either by mill refuse or by oil.

In a separate building known as the Caustic House is carried on the purification of the caustic liquor which comes from the cells.

The two steps of compression and refrigeration used in the manufacture of liquid chlorine are housed in separate, but adjacent buildings between which are located storage tanks tested to high pressure and heavily insulated. The tankage used for the storage and hand-

(Turn to page 64)



Many of the salmon packers have adopted the fibre container as this shipment will testify

Fibre Spells Doom of Wooden Box

An Interview With I. LUBERSKY

Sales Promotion Dept., Fibreboard Products, Inc., Portland

OOD packing cases will be replaced almost entirely by fibreboard boxes within the next five years. In the first place, wood will become too valuable to use for packing cases. While it is true that the box business developed because lumber men needed an outlet for inferior grades and smaller pieces, the time has come when these can be disposed of to pulp mills at a profit. With a market for these by-products, the time used in converting them into boxes can be put to better advantage. In the future lumber mills will cut only the finest quality, which will bring the standards of the industry to a higher level. Although lumbermen in the past have resented the development of the pulp and paper industry, they are changing their attitude and ceasing to regard it as competition. The two interests are coming closer, and the

time is not far distant when they will be sitting in counsel together.

In fact, lumbermen are beginning to regard fibreboard as ideal for packing certain kinds of lumber for shipping. Veneers, doors, trims and cedar siding are being shipped in fibre and corrugated casing. Better protection is thus afforded, handling is rendered easier, the appearance of the shipment is improved, the salability increased, and the estimate of the lumber raised.

One big advantage that will accrue through the use of fibreboard boxes is the advertising possibility. Fibre takes ink more readily than wood, and two colors can be developed so that the impression is four colors. And the cost of advertising on fibre is cheaper. This angle should be of interest to the canning industry. For not only will the canners benefit through the advertising, but their products will look more appetizing when shipped in fibreboard containers.

Through the use of fibreboard cases the canner will be able to increase the efficiency of his plant and cut down on his overhead. In packaging the goods, the men will not have to stop to look for lids and nails. In the latter alone a saving will be effected, not only in the nails used but in those lost. Noise will be reduced to a minimum. And it's now recognized that noise lowers efficiency. Moreover, fibreboard cases are from one to three cents cheaper than wood boxes, depending, of course, on market conditions.

Fibreboard boxes further commend themselves to canners because of their non-shrinkable quality. Wood cases do shrink; consequently, they must be made a trifle larger than is necessary for snug packing of the contents. As a result, the cans rattle around, become siightly dented and the labels worn. Goods received in such condition create ill-feeling between grocer and jobber.

The cost of shipping in fibreboard boxes is cheaper, the weight being less. A saving of from \$50 to \$75 per car in freight can be effected in transcontinental ship-



Fibre Containers Are Shipped in Compact Bundles



The fibre containers are set up as used and require no nailing after being filled with canned goods

ments. While economy of space doesn't affect rail shipments, it does make a difference when goods are shipped to foreign ports, the fibre board boxes taking up 20 per cent less room than wood containers. Fibre-board boxes are proving highly practical for shipment by boat, and as high as 750 pounds of merchandise in a single case is being carried successfully.

When goods shipped in solid fibre boxes are received at their destination, they are generally found in good order. A fibre box of canned goods may be dropped, with only slight damage, whereas if one drops a wood box he is almost certain not only to burst the case, but dent the cans badly as well. Dented cans mean claims. The settling of a claim means an expense of at least 50 cents, as reports must be made, a credit issued, etc. Too, the items themselves are probably a total loss.

The loss of canned goods when boats are being loaded for shipments at Alaskan ports is oftentimes a serious matter. Wooden cases of salmon will be dropped from the hoists, the boxes bursting and the cans rolling on deck where they are sometimes washed away. With fibre cases, this condition could in a measure be prevented. A fibre case will not burst in proportion to a wooden box, and perhaps only one or two cans will roll out. Fibre cases will be rounded where they hit, but will not smash in pieces.

Fibreboard boxes can also be used for prunes and evaporated apples. From sanitary conditions alone, fibre cases should commend themselves to packers of these products. By the use of fibre boxes we will get away from the evils of sawdust, slivers and nails, which invariably creep in when dried fruits are being packed in wooden boxes. The appearance of sawdust sometimes leads the housewife to believe that some insect has gotten into the container and deposited eggs.

While I have been talking chiefly about the adapta-

bility of fibre cases to fruit products, I don't mind saying that, barring weight and size, there is scarcely anything that can not be packaged for shipment successfully in fibre cases. Further, such containers will carry the products better and with greater safety, owing to their resiliency. Fibre boxes are proving their worth in packaging articles of odd shape, such as large horns and the like. The time saved in crating such articles is also a factor worth consideration. Anything of a delicate nature may be successfully packaged, so that it will carry safely.

To give some idea of the practical side of fibre cases for shipping, we recently conducted a test where we dropped fibre cases of stationery, weighing from 175 to 200 pounds, from a height of seven or eight feet to see how the damage compared with wooden cases of stationery shipped a short distance. The test proved that the fibre-cased goods were not injured in a greater degree than those shipped in wooden boxes.

Hobbs Heads New Promotion Service

L. E. Hobbs has been recently appointed manager of the newly organized promotion department of the Seattle division of Blake, Moffitt & Towne. Mr. Hobbs gained his paper experience during a year and a half in the Portland division of the company and is well fitted to give service to buyers of printing paper as he is a printer by trade.

The promotion department is designed to give a service whereby printers can gain creative ideas for making up posters, cards, pamphlets, direct mail advertising, booklets, etc. Mr. Hobbs has collected a number of unique and interesting samples of printed matter, which he is encouraging Seattle printers to inspect and gain new ideas from.

Heintzlemann Comes Down from Alaska

To confer on the progress made by the Zellerbach interests in surveying the stream and forest resources of Alaska looking to the eventual establishment of pulp and paper mills in that territory. B. F. Heintzelmann of the Tongass National Forest in Alaska made a trip

to San Francisco the first of the year.

J. D. Zellerbach, one of the successful bidders on the Alaska pulp timber, states that there are no announcements regarding Northern plans to be made at this time. He emphasized that the preliminary survey involves a great deal of field engineering and that the time for the survey work did not expire until June. It is probable that an extension of time will be granted. No mill site has yet been selected definitely, it is stated.

Zellerbach Bellingham Rumor Not Confirmed

Reports that the Zellerbach interests had taken an option on a site at Bellingham, Wash., for the purpose of building a pulp or paper mill created some stir in the industry when published in Bellingham newspapers in January. At the Zeller-bach headquarters in San Francisco, however, executives remained non-committal, pointing out that the published reports were entirely unofficial.

Vancouver Still Hopes for New Kraft Mill

Renewal of an option on a tract of land near Vancouver, Washington, by a New York financial group backing a proposed 200-ton kraft mill was reported early this month. The site lies about a mile and a half northwest of the city, and comprises what is known as the Fagin tract of 107 acres.

An advantage claimed for the location is that plenty of water from wells on the site would be available for mill operation. Opinion was expressed that a large reservoir would be built for water storage. The property adjoins the Columbia River, thus providing dock

facilities.

Vancouver residents expected a definite announcement regarding the proposed mill last month when a representative of the kraft mill group spent several days in that city and in Portland. Had negotiations between the Eastern visitor and a local power company been satisfactory, it is probable that the last barrier separating the city from the mill would have been removed, it was said.

It is declared, however, that the city's chances of getting the industry are good, and the belief is strengthened because of the option renewal. Names of the

interested parties are withheld.

A second rumor of another pulp and paper mill near Vancouver was not confirmed by civic leaders. Admission was made, though, that a separate group of pulp and paper mill promoters had held an option on another nearby site, but that the right had neither been exercised nor renewed.

C-W Employes Go to School

Sixty-five employes of the Crown Willamette Paper Co. started a course in pulp and paper making January 11 and will continue their studies for 25 two-hour periods. One class is being conducted at the Camas, Wash., mill with 35 enrolled, and one at West Linn, Ore., with 30 enrolled. Classes are being held twice a

A member of the school staff in each of the cities is in charge of the courses while the technical subjects are

being discussed by mill executives and outside authorities who are thoroughly familiar wth the detals of pulp

and paper manufacture.

In announcing the course, mill executives stated that "it is quite necessary that employes in one department understand how their work is related to the work of other departments, and the effect that changes in methods or process have upon the finished product. The purpose is to provide a clear background by means of reading, lectures and discussions for a clear understanding of the manufacturing processes of the pulp and paper industry. Particular emphasis will be laid upon the applications of physics and chemistry to mill operations, and upon the tests required to maintan standards of pulp, as well as finished products. The course is not intended to provide intensive training in any one department, but to give a general understanding of the industry, and to prepare the student for further systematic and intensive study in some particular branch of the company's operations.'

Each employe who completes the course will be given a suitable certificate to show that he has covered the work outlined. The subjects to be covered range from a study of the woods used for pulp, through all the operations of the mill to organization and management

Crown Willamette Sales Conference

The annual sales conference of the Crown Willamette Paper Co. was held at the Camas, Wash., mill on January 7, 8 and 9. For the first time the sales conference was held jointly with the manufacturing department, according to G. J. Ticoulat, San Francisco, head of the sales department.

The sessions were held at the Crown Willamette Inn with 14 men from the sales department and 12 from the manufacturing department in attendance. The conference program was divided into two main sections, one dealing with quality and service, the other with policy. Salesmen were present from New York, Dallas, Kansas City, Salt Lake, Los Angeles, Seattle, Portland and San Francisco, as well as officers of the company from the Portland and San Francisco offices.

That the conference was the most successful one ever held by the company was attributed in large measure to the plan of holding joint meetings of the sales and

manufacturing departments.

Charters Now Assistant Mill Manager at Camas

George Charters, formerly with the E. B. Eddy Paper company of New York, assumed the position of assistant mill manager at the Camas, Wash., plant of the Crown-Willamette Paper Co., January 7. Mr. Charters takes the position formerly held by H. H. Coolidge, who resigned late last fall to join the engineering staff of V. D. Simons.

Bloch Again Heads News Print Bureau

Louis Bloch, chairman of the board of the Crown Zellerbach Corp., largest paper concern on the Pacific Coast, was again elected president of the News Print Service Bureau at the annual meeting of that organization held in Montreal on January 22.

New Crane Manager at Seattle

C. G. Gamble has been appointed manager of the Seattle branch of Crane Co. He was formerly manager of the Spokane branch.

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Medford, Oregon, Pulp Project Revived

Reports from Medford, in Southwestern Oregon, indicate the revival of pulp mill interest in that section. White fir and other waste woods, as well as round pulp-

wood, would be used.

Backing the movement for the industry are ex-Senator W. H. Gore, a Medford banker and owner of timber tracts and mineral deposits in that section; E. C. Hurd, of Ashland, Oregon, and Charles D. Crouch, of Los Angeles. These men, together with their business associates, plan to form a corporation shortly which has for its object not only the building of the pulp mill, but also construction of a railroad from Medford to the coast for the delivery of pulp for water shipment, it was stated. In the event such road is built all of Southern Oregon would benefit, in that shippers would be better able to compete with those whose transportation problems are not so great, it was pointed out.

No response to inquiries addressed to Mr. Gore has been received, but Mr. Hurd has partially confirmed the report with the reservation that "there is no activ-

ity at present."

"The railway project," Mr. Hurd states, "runs Eastward from Medford up Antelope Creek, tapping the vast timber and non-metallic resources there."

Mr. Crouch could not be reached for a statement.

In connection with the proposed development, it was learned that a pulp and paper engineer had recently completed a preliminary survey of the pulp resources of that district for the principals.

Portland engineers interviewed regarding Medford's pulp mill possibilities asserted that the city's water resources are limited, and that the mill would probably have to be located about 20 miles east of the town to

insure an adequate water supply.

Some inquiries regarding pulp mill development in the Medford region were made in the summer of 1928. Some of the principals investigating at that time are the same as those named in connection with the present activity. At that time there were some meetings between the promoters and the Medford citizens, but failing agreement and certain support asked of Medford no definite action was taken and the matter apparently rested.

Rainier Pulp on \$2.00 Basis

The directors of the Rainier Pulp & Paper Co. have placed the Class A common stock on a \$2 annual dividend basis by declaring a dividend of 50 cents, payable March 1 to stockholders of record February 18. They also have placed the Class B common stock on a regular \$1 annual dividend basis by declaring a regular dividend of 25 cents a share and also declared an extra dividend of 25 cents a share on Class B common stock, payable March 1.

The Class A common stock is entitled to preferential dividends of \$2 per annum. After \$2 is paid on the Class B in any one year, then both classes share alike in any further dividend disbursements. The dividend action of the directors indicates that earnings at present justify dividends at the \$2 rate on both classes of stock. The Class A common stock was marketed last fall and

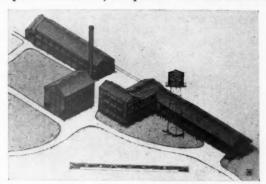
currently is selling for about 35c.

New Zealand Publisher Visits B. C.

Edgar Burton, assistant manager of Wilson & Horton, publishing the New Zealand Herald, Auckland, was a recent guest of the Powell River Co. and spent a day inspecting the big British Columbia news print mill.

Construction to Start on Rice Straw Mill

Construction on the proposed 25-ton rice straw paper mill for the Pacific Coast Pulp & Paper Corp., at Richvale, Calif., will be started within 30 days, according to an announcement made early in February by P. Swan, Portland, in whose office plans and specifications for the plant were recently completed. The mill will be in



Proposed mill of the Pacific Coast Pulp & Paper Co. at Richvale, Calif., on which construction is scheduled to begin immediately.

operation in about nine months, it is expected. Mr. Swan stated that the problem of financing the venture had been satisfactorily worked out, and that no further

delay is anticipated.

The company, as previously announced in these columns, proposes to utilize rice straw for paper manufacture. The annual economic loss of rice straw in the immediate district of the proposed mill site is reported to be more than a quarter million tons, which amount will more than supply the plant's requirements from year to year, it was asserted. Company officials declare that the cost of manufacturing rice pulp will be considerably below the cost of making pulp from materials used in the West.

C. A. Kieren, pulp and paper mill engineer for 30 years, now in Sacramento, will be in charge of construction of the new plant, afterwards filling the position of superintendent and general manager. Mr. Kieren, who some time ago perfected a process for making rice paper, recently invented a machine for treating rice straw pulp which shortens the cooking time of that product to one and one-half hours.

According to Mr. Kiernan the plant will be a complete paper mill. Equipment will include two digesters, a rod mill, three beaters, two Jordans, a 118-inch paper machine with a 70-foot wire, and will also include a power house unit with three boilers and generating station. The cost of the mill will be about \$625,000, it

is estimated.

Bond as well as wrapping paper will be manufactured. Mr. Kiernan states that production will probably start on wrapping papers, but also says that rice straw makes excellent bond paper and that a switch to the higher grade product would probably be accomplished soon after putting the mill into production. The unit to be built immediately will be the first of two such proposed.

The officers of the company are the same as those given in a news article published in the August, 1928, number of PACIFIC PULP & PAPER INDUSTRY, with the exception of the addition of George L. Bowman, of Chicago, a new director representing Eastern interests. It is believed that most of the financing of the project was done in the East, although this point was not confirmed.

D. M. Thompson, of Los Angeles, is president.

Willapa to Begin Construction

Preliminary work looking to the actual construction of the 75-ton Willapa Pulp & Paper Mills between Raymond and South Bend, Washington, was scheduled to start sometime during the week of February 11, according to company officials. The first step of the construction program will consist of driving from 1500 to 2000 piling for the foundation. The sub-contract for driving the piling was let early this month to the Willapa Construction Co., the general \$800,000 contract having been awarded last December to the Swenson Evaporator Co.

No delays in completing the mill by early fall are anticipated, sufficient stock having been sold to insure uninterrupted financing, it was announced. But little stock remains unsold, officials declare, and no difficulty is expected in finding outlets for the remainder. Some of the plant's equipment is already being built, and arrangements have been made to have the rest ready for installation as the units are finished. Although the mill will be known as a 75-ton plant, its capacity will be such that as high as 120 tons daily may be manu-

Although company officials insist that a plant superintendent has not as yet been selected, rumors persist that K. A. Forrest, manager of the pulp and paper division of the Swenson concern, is slated for the position. Mr. Forrest, who could not be located, was formerly sulphate superintendent of the Camas, Wash., Crown Willamette Paper Co. plant. Another report is current that Fred Kruse, formerly in charge of the St. Regis Paper Co., Watertown, N. Y., is to be named

The Willapa Pulp & Paper Mills is an Oregon corporation with headquarters in Portland. R. A. Swain is president, Jay Bowerman is vice-president, and E. A. Barry, secretary. Members of the board of directors include John P. Kavanaugh, Ed Cusick, Thomas Mahoney, Sam Graf, P. B. Sadtler, and W. G. Chanslor. Headquarters of the company were established in Portland when the corporation was organized in the fall

of 1927.

Although plans for the proposed plant have received numerous setbacks for some time, officials of the company now declare that all obstacles have been overcome and that construction is assured. A change in the plans and specifications to practically double the capacity of the mill is advanced as one of the primary reasons for the delay.

The mill will be located within 12 miles of the ocean and accessible to the largest freighters. A dock has already been constructed. Boilers and machinery formerly utilized by the Columbia Box Co., on which site the pulp mill is to be built, are on the ground. L. A.

DeGuere is engineer fos the company.

Portland Claims Unique Carbon Paper Factory

This is not a civic uplifter story; however-

Portland lays claim to being the only city west of Chicago maintaining a carbon paper factory—the Stenno-Ribbon & Carbon Manufacturing Co. The growth of the plant, founded in 1914, has been so rapid that the company was forced to move last year into quarters about three times the size of those originally occupied.

Tissue is, of course, the principle product used. While eastern mills supply most of the product, the concern buys locally whenever western paper can be used. Parenthetically, it may be explained that the tissues used are made of both wood pulp and rag. Some of the grades of carbon prints require a higher

specialty grade of paper than at present being manu. factured by Western mills.

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Coast mills supplying paper are: Crown Willamette Paper Co., Hawley Pulp & Paper Co., and the Inland Empire Paper Co. The matter of equipping one of the Coast mills with the necessary units to bring up the tissue to required demands has been discussed with officials of one of the larger pulp and paper companies, but it was said that the demand for the special product would not justify the expenditure at present.

The paper reaches the plant in rolls of 180 to 244 pounds each. An average of 2500 rolls are used annually. The present expansion program, now well

under way, will double the capacity.

Previous to coating the paper, ingredients for a given weight and purpose of carbon paper are weighed and introduced into steam jacketed vats where they are melted. The heavy solution is next poured into heavy grinders. From these the compound issues in a tiny stream which is congealed into large cakes which take the form of the container in which they fall. Fifty varieties of these cakes are kept in stock. When one is needed it is placed into a remelting vat, next being poured into the ink bath of the coater. Some of the ingredients used are carnauba wax, beeswax, castor oil, olic acid, neutral oil, various aniline dyes and other chemicals.

The coating operation is similar to that used in making gummed or waxed paper. The roll is placed on a spool and threaded. Just before it reaches the roller which contacts with the liquid ink, brushes working at right angles to the direction of the paper smooth it flat and even. The coatings are of varying thicknesses, and may be reduced to a thinness of one ten-thou-sandth of an inch. The paper is dry before being wound on the spool which completes the operation. From the coater the finished product goes to a slitter and counter and then to a cutter, when it is ready for the market. The company's trade territory includes many of the countries in the Orient.

No Announcement On Umpqua Project

Plans for a 100-ton sulphite mill, which the Umpqua Pulp & Paper Co., Portland, proposes building on DeWar's Island in the Umpqua River near Reedsport, Oregon, are progressing satisfactorily, stated W. L. Nederhoed, a company representative, when asked for a statement regarding development of the project.

"Preliminary arrangements are going ahead rapidly," Mr. Nederhoed said. "However, I am not in a position to release anything for publication just yet.'

A rumor that the company proposes to establish general offices in Eugene was not denied by a company official, although he stated that there is nothing definite to announce on this.

Timber for the use of the proposed mill is now being purchased in the vicinity of Reedsport and a considerable acreage is being taken up, it is reported. Several Eugene timber owners are said to be interested in development of the proposed mill.

Oxford Paper Co. Representative on Coast

H. S. Coke, manager of the Maine coated division of the Oxford Paper Co., New York city, of Rumford, Maine, is making a tour of the Pacific Coast, and visting the various branches and agencies of Blake, Moffitt & Towne, who are representatives of his company on this coast.

Paper Milk Bottles

Will the tinkle-and frequent! crash!-of the glass milk bottle give way to the soft-pedaled sounds of a paper container? Experiments now being carried out in New York City where 50,000 families are receiving their daily milk supplies in paper milk "bottles" forecast a potent possibility in this direction.

The Sheffield Farms Co. is trying out in the New York vicinity a wedge-shaped milk container made of paraffined spruce fibre. The company has announced that the glass bottle will be dispensed with entirely if the new container meets the approval of customers.

Several important economies in milk distribution are claimed to be possible with the paper container. Among these are less first cost, elimination of washing and sterilizing bottles, ease of filling with a seal that guarantees against substitution, and lighter delivery equipment. A motorcycle with a side compartment is said to be sufficient to carry 350 quarts, whereas a truck is now ordinarily used because of the excess deadweight of the heavy glass bottles and wooden cases.

It is reported that some Pacific Coast paper interests are greatly interested in the new commodity and that manufacture may be undertaken on the Coast in the

near future.

Oregon Legislature Considers Forest Taxation

The Oregon state legislature has for consideration during its present term a bill which is intended to encourage reforestation. The measure has been endorsed by a number of civic organizations and many prominent lumbermen and forest economists are taking an interest. One speaker, in pointing out the necessity for a bill of the kind proposed, stated that 44% of the towns in Oregon with a population of 500 or more are wholly or chiefly dependent upon lumber. More than 45,000 men are directly employed by the lumber industry, representing some 200,000 people whose living is derived from lumber.

The necessity of keeping private capital interested in retaining cut-over lands was stressed, as was the vital importance of keeping these lands busy growing timber when not diverted to some other useful purpose. It was pointed out that 1,500,000 acres of tax delinquent cut-over lands should be put back on the roll, and that it is the problem of everyone in the state to maintain

its forest industries.

The most practical form of legislative aid suggested, proponents declared, would be a measure providing a constant nominal yearly tax on the land, plus a yield tax on the crop when harvested. The proposed measure would not go into effect until March 1, 1933, thus giving ample time to consider essential provisions and needs.

Kupplers Busy With Several Jobs

Chris Kuppler's Sons, contractors, now are busy with several pulp and paper mill jobs on the Coast. At present they have crews at work on the new paper mill unit of the Grays Harbor Pulp & Paper Co. at Hoquiam, the second 100-ton unit of the National Paper Products Co. at Port Townsend, and a new boiler house addition to the Rainier Pulp & Paper Co. at Shelton.

Butler Visits the Coast

Paul Butler of the Butler Paper Corporations came cut from Chicago during January to spend a vacation in southern California.

New Interests Acquire Olympic Spruce Road

Prospects for early development of the last great untouched stand of timber in the Western Olympics in Washington became brighter with the announcement early in February that the so-called "government spruce road" had been purchased for \$2,000,000 by the Cres-

cent Logging Co. and associated interests.

The new owners, who will incorporate a new company to be known as the Sol Duc Investment Co., purchased the assets of the Lyon & Hill interests of Chicago which carries with it the stock in the Port Angeles Western, a railway extending about 80 miles west of Port Angeles and built by the federal government during war-time to take out airplane spruce. The railroad already has a permit to extend its road to the frontier town of Forks, and ultimately the road will be carried south along the Western slope to connect with the Grays Harbor region.

The railway came into prominence again about a year ago when legal difficulties developed after the road was incorporated as a common carrier and sought to extend its lines as such by securing condemnation of parts of the Bloedel-Donovan logging railroad.

The new group includes some of the most prominent men in the Pacific Northwest lumber industry. Among those mentioned are Joseph Irving, Sr. of Everett; R. D. Merrill, T. D. Merrill, W. E. Boeing, Timothy Jerome, A. W. Chisholm, Petrus Pierson, Fentress Hill and James Tyson. The last two named are from San Francisco.

That pulp or paper mill development will follow is freely predicted, and according to Mr. Jerome, who confirmed the news of the rail purchase, "such development is well within the realms of possibility although not in the immediate plans." Extension of the road will tap the heaviest stand of pulp timber on the continent. Much of this timber is the finest kind of Sitka spruce.

The rail purchase carries much political as well as industrial significance as Grays Harbor citizens are strongly behind the Finch bill now being offered in the Washington state legislature which would empower the Port of Grays Harbor to build a common carrier north from the Grays Harbor district into this same timber district. Purchase of the spruce railroad is expected to cancel the effect of the Finch bill.

Harry Orin Wilkin Passes

Harry Orin Wilkin, 61, one of the founders of the Pacific Paper Co., died at McMinnville, Oregon, January 22. Mr. Wilkins, a native of Illinois, came west in 1888 and settled in Tacoma, where he subsequently acquired an interest in W. L. Kelly & Co., a wholesale paper concern.

In 1892 Mr. Wilkin formed a partnership with Hugh McGuire and T. N. Stoppenbach and purchased the Kelly company. The name of the firm was at that time changed to the Pacific Paper Co. Shortly thereafter they moved the business to Portland, continuing the concern under the same name. Six years later Mr. Wilkin sold his interest to Mr. McGuire and Mr. Stoppenbach, who conducted the business until 1910, when they sold to the Zellerbach Paper Co.

Davies Organizes San Francisco Laundrymen

Paul S. Davies, formerly with the Oakland Paper Box Co. of Oakland, Calif., has recently organized the Laundry Owners Purchasing Co. of San Francisco.

T-R-A-D-E - T-A-L-K

Devoted to the Paper Trade of the Western States

Tompkins Shaping Trade Convention Program

George I. Tompkins, vice president and general manager of the Sierra Paper Co., Los Angeles, and chairman of the program committee for the May convention of the Pacific States Paper Trade Association, is giving careful thought to the selection of an interesting and helpful program, and has sent out a number of letters to members of the trade asking them to suggest subjects which they would like to hear discussed at the coming convention. Mr. Tompkins expects to bring these suggestions up for consideration with the other members of the program committee, R. K. Erlandson, of Blake, Moffitt & Towne, Los Angeles, and L. A. Colton, of the Zellerbach Paper Co., San Francisco, at a committee meeting to be held in San Francisco the latter part of February.

Charles Kahn, San Francisco, secretary of the association, states that the announcements for the convention will be mailed out during February.

The golf tournament at the paper trade convention is conducted each year by the mill representatives and officials and details of the tourney will soon be announced.

Tom Doane Founds Doane Paper Co.

Thomas H. Doane is back in the paper trade in San Francisco as head of the new Doane Paper Co., which opens at 558 Howard St. about the middle of February. Everybody in the paper fraternity along the Pacific Coast knows "Tommie" Doane and everybody is wishing him well in his venture.

Mr. Doane is a real pioneer in the paper trade in California, having served 19 years with Bonestell & Co., and 24 years with the Pacific Coast Paper Co., from which he resigned as general manager last year. Only Cutler Bonestell, head of Bonestell & Co., it is said, is older in years of service in the paper trade in California than Mr. Doane. Mr. Doane has served as president of the Pacific States Paper Trade Association.

Associated with Mr. Doane in the new company are his son, Osborne Doane, and John H. Todd. Both have been active in the paper trade, Osborne Doane having served as sales manager of the Pacific Coast firm.

The new Doane company was incorporated recently. It plans to carry fine papers, coated papers, bonds, wrapping papers, ledgers, envelopes and cardboards. Later the line will be enlarged to include practically all grades.

Since leaving the Pacific Coast Paper Co. last year Mr. Doane and his wife made a trip to Australia and the South Pacific Ocean.

Graham Executive Looks Over Wyoming Field

Laurence T. Johnstone, assistant branch manager for the Graham Paper Co. at Denver spent a great part of January going over the Wyoming territory with Wyoming salesmen of the firm.

Lane and Floercky Pool Efforts

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While some months ago Walter F. Lane and Herbert E. Floercky, Los Angeles, announced that they would form a new company to be known as the Lane-Floercky Paper Co., Herbert E. Floercky states that this plan has been abandoned, and that the Lane and Floercky companies will continue to be operated as separate businesses, but that the two companies in certain respects will co-operate with each other to secure greater effi-This co-operation extends to warehousing, office operation, and the employment of joint salesmen. Mr. Floercky states that both companies are increasing their lines and extending their connections on bonds and ledgers and other fine lines of papers, and that all the various priced bonds from cheap to 100 percent rag are carried as well as onion skin, book, and box stationery papers. B. Goodie and Ted Wilson, formerly salesmen for the Pacific Paper & Envelope Corp., Los Angeles, are now salesmen for both the Lane and the Floercky companies.

Denver Paper Men Attend Press Meetings

Prominent Denver paper men sat in on two Press Association meetings during January. On the 11th and 12th they attended sessions of the Colorado Press Club held in Denver and on the 17th journeyed to Cheyenne to attend the meeting of the Wyoming Press Association. At the latter place they were guests at a joint dinner of the Governor, the legislature and the press club. At both meetings the Butler Paper Co. furnished cigars and the Carter, Rice & Carpenter Paper Co. presented each delegate with portfolios of personal stationery. Paper firm executives who attended the meetings were E. B. Erskine, manager of the Butler Paper Co., R. J. Marlow, manager Graham Paper Co. and J. Harry Custance, president Carter, Rice & Car-penter Paper Co. E. K. Erskine of the Butler Co. was in attendance at the Denver meeting and W. A. Jennings, Wyoming salesman for the same firm was at the Cheyenne gathering.

Los Angeles Firm Liquidates

The Standard Woodenware Co., 828 Traction Ave., Los Angeles, paper jobbers, announce in a letter to creditors, signed by Joseph L. Jones, president of the firm, that the firm is retiring from business and voluntarily liquidating all the active assets, composed of merchandise, equipment and accounts receivable, the proceeds of which will be deposited in the Farmers' National Bank, Los Angeles, for the purpose of paying in full all claims existing against the concern. The business was established in 1889.

Salem Jobbing House Incorporates

The Rahn-McWhorter Paper Co., Salem, Oregon, was incorporated last month with a capital stock of \$3500. Arthur J. Rahn, H. C. McWhorter and James G. Heltzel are named incorporators.

Donald Jeffries Joins B. M. & T.

Donald L. Jeffries, son of Frank E. Jeffries, for years head of the Tacoma Paper and Stationery Co., of Tacoma, Wash., has been placed in charge of the newly created inspection department at the head office of Blake, Moffitt & Towne in San Francisco. The Tacoma Paper & Stationery Co. is one of the links in the coastwide Blake, Moffitt & Towne chain.

The inspection department was established by Blake, Mossitt & Towne, it was announced, to meet increasing requirements of the trade. The step, it is explained, is further evidence that modern business methods attach more and more importance to the value of exacting tests in order to maintain standards

of quality and uniformity.

Donald Jeffries has been raised in the atmosphere of paper. He is a graduate of the University of Oregon and served for a time at the Camas, Wash., mill of the Crown Willamette Paper Co. Later he was connected with the testing laboratory of the Neenah Paper Co. at Neenah, Wisc., and was with the Northern Paper Mills a Greenbay, Wis. To round out his experience, young Mr. Jeffries recently completed an intensive course in printing at the Carnegie Institute of Technology at Pittsburgh, studying the chemistry of printing inks and other technical matters connected with the printing craft.

But Buist's Spirit Was Not Dampened

A fine way not to spend a Sunday in California is to drive from Los Angeles to San Francisco in the rain, according to Norman A. Buist, Los Angeles, representative of D. S. Walton & Co. and the McLaurin Jones

Co., paper and specialty manufacturers.

Generally Mr. Buist speeds up the coast from the one city to another in about twelve hours, but on February 3 he left Los Angeles at about five in the morning and did not reach San Francisco until after eight the same evening. It rained all the way and Mr. Buist reported he passed more than 30 cars which had skidded off the road or had drawn up at the side for repairs.

In San Francisco Mr. Buist conferred with his asso-

ciate, B. P. Lewis.

Open Sacramento Paper Jobbing Office

As part of a program of expansion, the Pacific Coast Paper Co. recently opened a branch office in Sacramento, Calif., Thomas A. O'Keefe, San Francisco, general manager, has announced.

The new Sacramento office is in charge of Bud Elmer, formerly with the Zellerbach Paper Co. in that city. A complete line of fine and wrapping papers will

be carried

The Pacific Coast Paper Co. now has three offices in California—the headquarters at San Francisco, the branch at Fresno and the new office at Sacramento.

Green Bay Representative in Los Angeles

Guy Leaper, mill representative for the Bay West Paper Co., Green Bay, Wis., manufacturers of Craft Dubltowls and Singltowls, is in Los Angeles visiting the trade with the company's Los Angeles jobbers and distributors. Mr. Leaper is showing a most unique booklet printed on towel stock, and equipped with pockets containing samples of his company's paper towels.





CLEM REIS

ERNEST FERRIS

Reis and Ferris Win Promotions

Clem Reis, who has been country sales manager for the Los Angeles division of the Zellerbach Paper Co., recently was promoted to city sales manager of the wrapping and stationery departments of the Los Angeles division. Ernest Ferris, who has trained under Mr. Reis for a number of years, has been promoted to country sales manager.

Whiteman Heads B. M. & T. Department

R. R. Whiteman the first of the year became manager of the coarse paper department of the Los Angeles division of Blake, Moffitt & Towne, succeeding E. A. Doran, who recently went to San Francisco to assume more important activities for the company.

Mr. Whiteman has been assistant manager of the coarse paper department for some six months, and in the spring of this year will have been with the company for fifteen years, although he is a young man, having started with the firm at an early age, and working his way up in the sales department to assistant manager under Mr. Doran.

It is stated that the advancement of Mr. Whiteman is in line with the policy of Blake, Mossitt & Towne to fill responsible positions where it is possible from their own organization. Mr. Whiteman's friends are busy wishing him a most successful year in his new position.

Just One Of Those Things

Skidding trucks careening suddenly through the plate glass front window of the Kaplan Paper Co., Seattle, cause but small stir in the daily routine of this

organization

During the January cold snap a truck skidded down the steep hill in front of the building, crashed through the front window and ended up in the office of the paper company. When asked about the accident, Mr. Kaplan looked bored and said: "So many trucks have crashed through that window that we don't pay any attention to them any more. Business goes on as usual and if we ever tried to keep track of the number of trucks that have landed in our office we would have to use the adding machine."

Whenever the hill gets slippery Mr. Kaplan merely keeps away from the front window and lets the trucks

come, he says.

Arthur Towne Heads Sales Promotion

Announcement has just been made by Blake, Moffitt & Towne of the appointment of Arthur W. Towne as manager of sales promotion for San Francisco and northern California divisions.



ARTHUR W. TOWNE Boye Portrait, San Francisco

Mr. Towne has been advertising manager of the concern for a number of years and it is understood that he will continue to exercise general supervision of this activity.

In assuming the duties of his new office his principal effort will be toward coordinating the sales policy of the various northern California divisions, co-operating with the management and sales personnel at each point, giving attention to the promotion and development of new business and studying

how the interests of the trade can best be served. Mr. Towne is the grandson of James W. Towne, one of the founders of the company, which was established in San Francisco in 1855. He first became actively associated with Blake, Moffitt & Towne on his graduation from the University of California in 1916.

The following year, upon the outbreak of the war, he entered the Army, and after two years in the service as lieutenant in the coast artillery re-entered the firm's employ, devoting his attention to the selling end of the business.

As advertising manager for the past several years he has been closely connected with standardization of brands and merchandise carried in stock by the Blake, Moffitt & Towne chain as well as developing many direct mail and trade paper advertising campaigns.

Under his direction last year new quarters were established for the promotion department of the San Francisco division, which printers and advertisers have found very helpful in seeking new ideas from the large and well selected group of printed specimens regularly maintained in the library.

Butler Chief Visits Coast

Paul Butler, president and general manager of the Butler Paper Corporation, is out from the East enjoying a vacation at Santa Barbara, Calif. Mr. Butler is also president of the Pacific Coast Paper Co., San Francisco, one of the Butler subsidiaries.

H. S. Bonestell Voyaging

H. S. Bonestell, of Bonestell & Co., San Francisco paper jobbers, is expected home late in February from a trip to countries bordering the Pacific Ocean.

Some Los Angeles Changes

M. G. Grace, formerly connected with the sales department of the Pacific Paper & Envelope Corp., Los Angeles, is now with Fred H. French Paper Co., Los Angeles. Henry Engle, also formerly with the Pacific Paper & Envelope Co., now is with the Carpenter Paper Co., Los Angeles.

Hopkinson Joins Butler Paper

N. D. Hopkinson, well-known in the paper trade along the Pacific Coast, has been appointed special representative of the Butler Paper Corporations in a sales capacity and, for the present, will assist Thomas A. O'Keefe, manager of the Pacific Coast Paper Co., San Francisco. Announcement of Mr. Hopkinson's appointment was made by Mr. O'Keefe.

Mr. Hopkinson has served as an officer of the Pacific States Paper Trade Association and has been connected with the Zellerbach Paper Co., and Blake, Moffitt & Towne, resigning as sales manager of the latter firm last year. He took up his new duties January 21.

Changes at Western Pacific Co.

Several changes in the executive force of the Western Pacific Paper Co., Los Angeles, recently have taken place. Charles W. Lynch, who has been manager of the company's specialty paper department has severed his connection with the company, and purchased the Embosso-Graving Co., Los Angeles, one of the largest distributors of Christmas cards on the coast. W. C. Atkinson succeeds him as manager of the specialty paper department. George H. Thorpe, who has been credit manager for the company since the business was founded, has resigned to take a position with the Western Newspaper Union, Chicago, he having formerly been credit manager for that concern. He is succeeded by A. W. Tank, who formerly was credit manager for the Western Newspaper Union at Lincoln, Nebraska.

Butler Holds Annual Salesmen Meeting

The annual salesmen meeting of the Denver branch of the Butler Paper Co. was held at the Albany Hotel in Denver on Thursday, January 3. Salesmen and executives of the firm were in attendance and spent the time exchanging ideas and going over the program for the coming year. A banquet in the evening brought a most successful gathering to a close.

Harting Leaves for Eastern Trip

Lester E. Harting, general sales manager for the Pacific Northwest Mills, Inc., Portland, Oregon, was a Seattle visitor during the last week in January. Mr. Harting is making a sales trip over the entire territory and left Seattle on the first of February for Chicago and New York. The Pacific Northwest Paper Mills are makers of "Adwrap", a specialty grade of wrapping paper.

Moor Appointed Receiver of Envelope Firm

W. N. Moor, Jr., has been appointed receiver and trustee of the Pacific Paper & Envelope Corp., Los Angeles, which recently went into bankruptcy. At present, the place of business of the Pacific at 424 Boyd Street is closed. At some future date Mr. Moor expects to dispose of the assets, either by private sale or auction.

Dixon Brothers Visit Eastern Mills

Lester Dixon of the Dixon Paper Co. of Denver and his brother, Paul J. Dixon of the same firm of Salt Lake city began a three weeks trip on January 22 on which they will visit Chicago, Kalamazoo and several paper mills in the East, in preparation for the coming season.



HERE'S HOW ED DORAN WAS WELCOMED INTO THE SAN FRANCISCO PAPER FAMILY
Flashlight of banquet given new Blake, Mossit & Towne chief. The guest of honor is at the speakers' table and can be identified from the napkin stuck into his vest. Also at the speakers' table are, left to right: J. W. Towne, Charles Pritchard, Bert Reynolds, Louis Colton, Tom Doane and I. Zellerbach.

Doran Handed "Key to the City"

D Doran should feel he is as much of a fixture in San Francisco now as the Ferry Building or Twin Peaks, for he was given a golden key to the city and a very convincing reception by the San Francisco district paper fraternity at the Hotel Mark Hopkins February 5. Mr. Doran came from Los Angeles recently to become vice-president and sales manager of Blake, Moffitt & Towne.

Practically the entire paper family of the San Francisco area was represented at the dinner, the group of more than sixty being made up of mill officials and representatives, men from the paper trade houses and visitors from the east and south.

Sollie Friedenberg of the Zellerbach Paper Co. arranged the party and outdid himself. Frank Shaw, imported from Coffee Dan's, a storied San Francisco eating place, was in charge of the entertainment and saw that there was action all the time. It didn't take Frank long to get the banqueteers singing old favorites and the banqueteers unanimously voted Frank a 100% success in picking dancers and entertainers for the

Doran Confirms "Rumor"

W. B. Reynolds of the General Paper Co. was toast-master and the theme of the evening was on the general subject: "Los Angeles' loss is San Francisco's gain." Mr. Reynolds first official act was to order a general roll call, where everybody introduced themselves, giving their first, middle and last names.

Mr. Reynolds said the paper fraternity was giving Ed Doran such a fine welcome because detectives had reported they could find nothing against him and couldn't even confirm the rumor that Ed got the ten million from the Julian Oil Co. stock sales.

At this point a "planted" Zellerbach price book was extracted from Doran's pocket and, confronted with this "evidence", he said, "This confirms the rumor that Blake, Moffitt & Towne have just bought out the Zellerbach Paper Co."

They brought out a cake for Ed, one with a big candle on it, and after trying to cut it, he paused to ask: "Has any gentleman in the house got an ax?", for the cake was made of rubber. The ice cream was a feature,

for the word "Ed" was lettered on the top of each plate.

There were speeches, all welcoming Mr. Doran to San Francisco and all commenting favorably on the splendid cooperation and "get-together" spirit shown by the various elements of the paper business in San Francisco.

Isadore Zellerbach, president of the Crown Zellerbach Corporation, was the first speaker and said he was very glad to welcome Ed Doran to the San Francisco Paper Trade Association. Mr. Zellerbach said the history of the organization was a story of people in the same business pulling together and he said he knew Mr. Doran would help write new chapters into this history.

Colton's "Line" Fails

Introduced as the "dean of the paper trade, bar one", Tom Doane made an interesting talk and said his only regret was that Cutler Bonestell, the oldest paper man, in point of service, in San Francisco, was not present. Mr. Doane, who has just launched the Doane Paper Corporation, said he was 43 years in the trade but with a company just one day old. Mr. Doane has served in the past with Bonestell & Co. and the Pacific Coast Paper Co.

Louis Colton of the Zellerbach Paper Co. made a hit by submitting some comical paper and paper board samples for Mr. Doran's inspection. He submitted a sample of "Palace Hotel Board" and said it was a pretty good lunch for \$1.25. Then he had a display rack showing envelopes "in gangs of four, removable at will or will not," also he submitted some nice black bond paper, and his last sample was of "Edible Butcher Manila", which could be used for wrapping tripe or liver and later would make an excellent base for soup. No, Mr. Doran didn't care for any of Mr. Colton's papers today.

Another interesting speaker was Fred Wight, pioneer of the Crown Willamette Paper Co., who recalled that 40 years ago always on "Steamer Day", the 13th of each month, he regularly called at Bonestell & Co., collecting the monthly bills from Tommie Doane. Mr. Wight paid a tribute to the paper jobbers, stating the manufacturers would have no business if it were not for the

(Turn to page 64)

Set-up Folding Corrugated Solid Fibre

BOARDS and BOXES

A department for interests allied with the pulp and paper industry Board
Mills and
Paper
Converters

Paper Box Merger in L. A. Rumored

Rumors are current that a merger of paper box companies in Los Angeles is contemplated soon and that it may be engineered by a financial house which was active in perfecting a similar merger of San Francisco and Oakland companies recently. Madame Rumor has it that the paper box companies of the southland included in the merger are: Hollywood Paper Box Co., Standard Paper Box Co., Angelus Paper Box Co., Hersee Paper Box Co. and possibly the Los Angeles Paper Box Co. and the Eureka Paper Box Co.

Latest reports indicate that the Standard company is no longer interested in the possible merger. Executives of the companies reported to be involved are maintaining a noncommittal attitude, declining to discuss the rumor. From non-official sources, however, it is said that the merger is well along and that a definite announcement will probably be made in March.

He Knows His Golf, Gus Does

Gus Trost of the Fleishhacker Paper Box Co., San Francisco, was crowned champion of the paper box golfers at a tournament held at the Beresford Country Club, January 10 under the auspices of the San Francisco section members of the Pacific Coast Paper Box Manufacturers' Association. Gus had a low net of 77 and took home plenty of golf balls, which were given as prizes.

Other scores were: L. E. Raisin, 80; M. V. ("Dick") Brooks, 82; Michael Devers, 85; Louis Thiebaut, 85; Ralph Comstock, 86; A. B. Korbel, 86; Dave Sahlein, 91; Hugh Peat, 94; Jake Gilman, 97; W. H. Thomas, 100 and C. J. Bastedo, 106.

Longview's Bag Factory Speeding Production

With nine machines in operation, the new bag department of the Longview Fibre Co. now has a daily production of more than half a million paper bags. The record run for eight hours was 640,000 bags. This department of the plant, which started in operation in November, 1928, employes nine men and 17 girls. The two smallest size machines have just been equipped with automatic tyers.

PRODUCTION OF BOXBOARD

December, 1928

Based on Reports to the U. S. Department of Commerce

1000	Production	Per Cent of Capacity	New Orders	Unfilled Orders End of Month	Stocks End of Month
1928— December	205,046	71.2	197,148	94,174	55,624
November	*241,924	*84.0	*248,147	*93,203	*47,693
Total Year	2,682,845	78.9	2,695,047		**********
1927-					
December	188,228	68.4	180,409	74,664	42,777
Total Year	2,401,324	71.3	2,476,211		
*Revised.					

Thiebaut Box Factory Dismantled

In existence since 1868, the paper box plant of Thiebaut Brothers, San Francisco, has been dismantled and its identity merged with the new Consolidated Paper Box Co., a combination of six San Francisco and Oakland box plants.

The Thiebaut establishment, it was claimed, was the oldest paper box factory in the San Francisco bay region. Another pioneer plant, the Enterprise Paper Box Co., San Francisco, was recently dismantled to join the Consolidated.

Three generations of the Thiebaut family worked in the Thiebaut plant. The business was established shortly after the Civil War by Charles Thiebaut and was carried on by his two sons, Louis A. Thiebaut, Sr., and Julius Thiebaut. Later a third generation, represented by Louis A. Thiebaut, Jr., became a part of the firm.

In merging with the Consolidated, Louis A. Thie-baut, Sr., became secretary of the new company and his son is associated in the enterprise. Julius, or "Jill," as everyone calls him, is out of the paper box business and has not yet announced his future plans. He plans a trip to Hawaii soon and may later go on around the world.

In addition to the Thiebaut Brothers and Enterprise plants, the Consolidated includes the Independent Paper Box Co., Oakland; Raisin & Zaruba, San Francisco; York-Stern Paper Box Co., and one half of the Union Paper Box Co.

The equipment of the Thiebaut and Enterprise plants is distributed among the York-Stern; Independent and Raisin & Zaruba plants. The Union Paper Box plant is operating as an independent unit.

Edgar L. Stern, general manager of the Consolidated, reports that the company is getting into 100 per cent action and is effecting operation economies as a result of eliminated overhead and duplication. Head offices are at the former Raisin & Zaruba plant at 346 First St.

W. E. Warneke Dies in Los Angeles

W. E. Warneke, old time paper box manufacturer of Denver, died in Los Angeles on January 23, following several months illness. For more than a year he had been suffering from high blood pressure and in October went to the Pacific Coast city in hopes of building up his health. Mrs. Warneke accompanied him and was at his bed side when death came.

The late W. E. Warneke was a most familiar figure in Rocky Mountain paper circles. For the past 23 years he had been identified with paper box manufacturing in Denver. In 1905 he purchased a half interest in the Inland Paper Box Co. from H. H. Hildebrand Sr., founder of the firm. Harry Hildebrand, son, became a partner of Warneke when the elder Hildebrand died. For 20 years the Inland company operated at a Blake Street location, purchasing the old Peters Paper Co. building on Wazee Street and moving in in 1927. The

Inland company grew considerably during Mr. Warneke's managership until at the time of his death the number of employes had increased to 125. He had taken a most active interest in affairs both of his firm and the industry at large up to the time illness overcame him and he was forced to seek rest.

Warneke was born in Cincinnati in 1866 and up to the time of his moving to Denver had spent many years identified with the paper industry in the East.

Officers of the Inland Paper Box Co. state that the business will continue as in the past with no change in personnel in any of the departments.

Longview Fibre Acquires Eastern Box Factory

The Longview Fibre Co. has acquired by merger the assets of the General Fibre Box Co., manufacturers of corrugated fibre boxes, at Springfield, Mass., according to announcement during the latter part of January by H. L. Wollenberg, president of the Longview concern.

The Springfield plant will continue to operate under the name of the General Fibre Box Co., with the same personnel as heretofore.

Clarence J. Schoo, president of the eastern concern, has become vice-president and director of the Longview Fibre Co. The Longview company has been shipping kraft fibre board, via American-Hawaiian line steamers, to the Springfield company for some time, and will continue the shipments.

The Springfield box factory is an old and well established concern and is regarded in the trade as excellently located to share in the business of the big Eastern markets. Springfield is about 100 miles from Boston and 150 miles from New York. Mr. Schoo, head of the box plant, has won a high regard for himself in the fibre container industry.

Some speculation exists on the Coast about Longview Fibre Company's further moves to establish outlets in the East. The present acquisition, coupled with the \$5,000,000 mortgage recently placed against the Longview mill to secure capital, is construed by some to mean further moves in the way of expansion, but no confirmation on this point has been officially given.

L. A. Box Makers Benefit by Meetings

In writing of the meetings of the Los Angeles Box Manufacturers Association for the December issue, an error was made. It was stated that this year it was planned to hold but one regular meeting a month, whereas the association is holding a regular meeting each week. It is the credit chapter of the association which will hold a meeting each month. This chapter was formed the latter part of last year, and is affiliated with the Los Angeles Credit Men's Association, some of the Los Angeles paper jobbers as well as box manufacturers being members of the chapter. At the meetings of the chapter credit policies and other matters pertaining to credits are discussed. It is stated that the meetings have furthered helpful exchange of credit information among the Los Angeles box manufacturers and thus have had a tendency to promote the spirit of co-operation and good fellowship in the trade.

Members of the association and certain members of the allied trades meet to play golf on Thursday of every other week. Different country clubs are selected for these much enjoyed contests, the participants arriving in time to have lunch together at the club. The attendance at these affairs averages around fifteen persons. On Thursday, February 7, the party played at Fox Hills.

Keystone Box Using Water Colors

Water color ink is the latest innovation in box cover printing being experimented with by the Keystone Box Co., Seattle.

Water color printing is clearer and more striking than oil, but requires more careful press work and greater caution in handling with absolute cleanliness. Color combinations that are either unsatisfactory or unattainable when tried with oil, are easily achieved with water color. A delicateness and brilliance of shading that makes for an attractive box cover is one of the features of the ink.

A variety of colors are possible. One of the most remarkable illustrations of the strength of the water color is the fact that at one printing a striking white or gold can be printed on a black background—a combination that requires three or more impressions with

The principal drawback to the use of water color inks is the fact that the colors fade when exposed to sunlight and will blotch if they come in contact with any moisture.

New United Plant Will Be Modern

All the mechanical improvements and up-to-date methods found in Eastern paper box factories are to be incorporated, as far as possible, in the new plant of the United Paper Box Co., being erected in San Francisco. Samuel Platt, president of the United, recently returned from the East, where he inspected box plants to study improved methods.

The new United plant, it is said, will be the largest paper box making unit in San Francisco. It will be arranged for straight-line production throughout and will operate on set-up boxes. The plant will be ready around the first of March.

The United company is the result of a merger of the Mission Paper Box Co. and Scott Bros., Inc., two San Francisco box companies.

Nashua Gummed Paper Augments Staff

J. L. Kill Kelley, center of the Dartmouth football team of 1927, has come to San Francisco to work with the package sealing division of the Nashau Gummed & Coated Paper Co. Joseph C. Sullivan has also come out from the factory and he and Mr. Kelley will work on the sealing machines, while Jim Nields, representative of the Nashua company, will continue to handle the paper end of the business. Their offices are at 525 Market St., San Francisco.

Plan Gummed Paper Sales Campaign

Norman A. Buist, Los Angeles, and B. P. Lewis, San Francisco, who handle the McLaurin Jones Co. line on the Pacific Coast, report that the mill is planning an intensive direct mail campaign, costing \$50,000, on guaranteed flat gummed papers. Advertising matter is being sent to paper jobbers, who handle the line, and to their printing and lithographing customers. The line has a new slogan: "The paper of a thousand uses".

Bender Looks Over Los Angeles Trade

Ray Bender, sales manager of the Pacific Paper Products Co., Tacoma, was in Los Angeles the week of January 26, going over the wax paper situation with the company's Los Angeles selling representatives, Johnson, Carvel & Murphy.

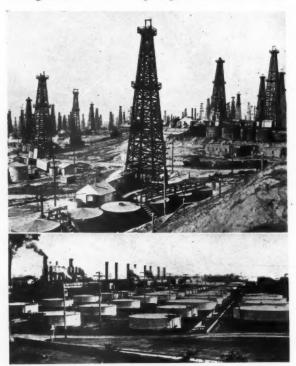
How's Business?

"The Paper Industry Reflects the General Prosperity"

Thumbnail Sketches of the Pacific Coast's Principal Resources and How They Are Faring

Oil-California's "Liquid Gold"

IN CALIFORNIA oil has been and is magic, and surely Aladdin's lamp could not have produced more wonderful results than California's "liquid gold" has. In the year 1849 some 70,000 persons rushed to California, searching for gold, but none of them gave heed to the "liquid gold" under their feet,



The forests of drilling rigs are characteristic of the oil fields. Above is a view of the famous Signal Hill district. Below is a refinery operated by one of the large California oil companies.

which was to be the means of creating one of the State's most outstanding and far reaching industries. For a long time California has turned out more than 30% of all the gold produced in the United States, and yet in 1915, a banner year in California's gold production, its value amounted to \$22,442,000, while in the same year California's oil production was valued at \$345,546,000.

Today the oil fields of California are more productive than any other areas of equal size in the world. They furnish 25% of our national output and 18% of the world output. The grand total of California's production in round figures and up to the close of 1927 was 2,800,000,000 barrels, valued at \$3,000,000,000. Contributing to the output of 1927 of 203,750,000 barrels were 500 companies, operating more than 11,000 wells. At this writing figures for 1928 have not been compiled, but a leading authority on the industry is

inclined to think that the output for 1928 will equal that of 1927.

There is said to be well over \$1,000,000,000 invested in the oil industry of California. Within the confines of the state there are maintained 5,000 miles of pipe lines, with above ground storage totaling 205,000,000 barrels capacity. California has 78 refineries with an aggregate daily indicated capacity of 884,925 barrels, and representing many millions of dollars of invested capital, some of the larger ranging in cost from two up to as high as twelve million dollars. In addition to these refineries there are 136 natural gas gasoline plants in operation. Large tank farms provide great storage facilities. California leads with a storage facility of over 200,000,000 barrels capacity.

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A Big Payroll

Some 60,000 persons are employed by the oil companies in California, and their wages amount to some \$125,000,000 per year. It is stated that there are 200,000 persons in California who are more or less dependent upon the oil industry for their incomes, such as hundreds of companies supplying equipment and various supplies, engineers, specialists, lawyers, etc. The industry yearly purchases over \$100,000,000 worth of equipment and supplies, it is reported.

Oil plays a highly important part in the way of transportation. It was California oil that first put the Panama Canal on a basis where it more than made expenses. Los Angeles Harbor, alone, last year exported 116,000,000 barrels of petroleum products, all which were produced in the Southern California territory which lies between Bakersfield and Huntington Beach. California supplies 85,000,000 barrels of fuel oil to drive locomotives between the Missouri River and the Pacific Coast each year. The transportation end of the business requires the use of vast fleets of ocean tankers, railway tank cars, and automotive tank trucks. At the beginning of 1928, the world's fleet of tankers, over 9,000,000 dead weight tons, totaled 1175, of these some 400 are American ships.

California Leads

California petroleum furnishes the bulk of industrial fuel and lubricants, as well as the gasoline for 3,000,000 motor vehicles, for the western portions of both the North American and the South American continents. In 1927, more crude oil was treated in California refineries than in any other major oil region in the country.

And, speaking of the magic of oil, there is many a story to be told of people in modest circumstances, holders of a ranch or a strip of property in California, who have suddenly become persons of wealth owing to the waving of the magic wand over their holdings. The magic touches cities as well, and Long Beach is an instance. Some years ago, the city authorities of Long Beach purchased 180 acres of water bearing lands, as a source of future water supply for that city. Later it was found that not only was there water there but oil as well. In six years the City of Long Beach has taken in \$6,330,000 from its oil holdings. This income is being expended for permanent improvements in the beach city, so the magic extends to the entire population, and to the many tourists and pleasure seekers who visit Long Beach yearly.

Note: Pacific Pulp & Paper Industry is indebted to Mr. Edwin Higgins, managing director and secretary of the Chamber of Mines and Oil, Los Angeles, for his permission to quote certain figures and statements from his recent booklet, "California's Oil Industry".

Plan Extensive Reforestation Work

More than 2000 acres of cut-over land owned by the Long-Bell Lumber Co., in Cowlitz and Lewis counties, Washington, is to be reforested, much of it by artificial hand planting during February and March. It is interesting to note that in this reforesting a variety of species are used, and while Douglas fir predominates, species of known pulping value are being used in mixture with the timber-tree species intended for saw-log yield. The company, according to J. B. Woods, its chief forester, is anxious to obtain early thinnings of merchantable value, and that is the reason for the pulping species.

In the reforesting, as he explains it, "we do not wish to put all our eggs in one basket, subject to the hazards of disease and insects, therefore we do not plant any

clear stands."

The replanting program for this winter is the largest so far. In 1928, a total of 1,700 acres were reforested, and in 1927 the total was 400 acres. The replanting must necessarily be two years after the area has been logged off. It is the intention in the reforesting to re-

forest at a rate equal to the annual cut.

Douglas Fir, Western Hemlock, Sitka Spruce and Red Cedar are the principal species restocked. Exotics of special value interest the company, and redwood and Port Orford cedar are being introduced on proper sites in a modest way. "While it is too early to report complete success with the planting programs, we are encouraged by growth of all species used," says Mr. Woods.

Taxation is a vital factor in reforesting. With adequate fire protection and reasonable taxation forestry is a practical possibility. Timber growth is amazing, and can be enhanced by thinning. But the financing is an important problem. Says Mr. Woods: "Beginning with nominal land values, fairly low planting costs, and compounding interest on this investment at a long time rate of five per cent; adding to that growing total the annuities for protection and management, plus taxes on cut-over lands at current rates; and we face the prospect of investing \$150 to \$175 an acre in our handplanted stands over a period of 50 years. We expect that the value of materials here grown will be great enough 50 years hence to return this indicated investment—but increased taxes on land or growing crops would wreck this prospect entirely. We go ahead because we believe that in the near future the citizens of the state of Washington will insist upon tax legislation to permit and encourage forest growing."

Big Timber Purchase on Lower Columbia

A rumor that Crown Willamette Paper Co. was enlarging its timberland holdings went into circulation in January, when it was reported that the Bank of California Association had purchased a large tract of cut-over and second growth timber land near Grays River in extreme southwest Washington. The bank has been conducting its purchases through Mason and Stevens, a Portland firm of timber experts, and no news has been forthcoming on actual transactions.

It is not known who the bank represents, but it is known that the bank has been buying up large tracts of cut-over land—much of which has a second crop well started—in the lower Columbia River district for some months. Some of the land recently purchased adjoins present timber holdings of the Crown Willamette Paper Co., and this fact started a rumor that the purchases were being made for Crown. This point has not been confirmed, however, and some volunteer the opinion

that Crown is not concerned and that some other interests are making the purchases for the "long pull". Much of the land has been purchased, it is learned, at prices varying from \$5 to \$20 per acre, and the most of it is land suitable for reforestation work.

Will Survey B. C. Forests From Air

During the coming summer the provincial government will undertake an extensive survey of British Columbia forest resources from the air. This project was announced by Hon. F. P. Burden, minister of lands, who said that the cooperation of the federal government would be obtained in an effort to make the aerial survey the most complete of its kind ever attempted.

Mr. Burden believes that there are large areas of timberland, especially in the northern central spruce belt, that have so far not been mapped at all and that they represent resources of considerable value. He claims that ground surveys carried out in the past have entirely ignored important stands that may some day be utilized by pulp or paper mills, and that the government should not delay any longer before obtaining

an accurate estimate of their extent.

"Ground surveys take more time and are costlier," says Mr. Burden. "It will be possible to make a fairly exhaustive check by airplane of the forest resources of a certain area within a few hours that would require several days of work by surveyors working on foot."

Forest reconnaissance has been carried on in a small way in British Columbia before, but never on such

broad lines as are now contemplated.

Washington News Mill Buys Large Timber Land

The Washington Pulp & Paper Corp., operating a 270-ton newsprint mill at Port Angeles, Wash., recently purchased a big stand of timber from the Bradley estate in Clallam County, Washington, as a reserve supply. The stand is in the vicinity of Neah Bay, the most northwesterly point in the United States. To date no particular plans for this stand have been made. The tract includes about 1700 acres.

Erect War Memorial at Powell River

Erection of a war memorial for Powell River, a project which has been discussed for two years by ex-service men living there, has been assured by the courtesy of the Powell River Co., which has granted the use of the site now occupied by an old theatre on Second Street. Plans for the memorial, prepared by John McIntyre, architect, have been approved.

Ray Smythe Now Manager of Willamette Iron

Following some reorganization in the Willamette Iron and Steel Works, Portland, Ray Smythe has been placed in charge as manager. He has been with the company for some time, being particularly interested in that department of the organization manufacturing pulp digesters.

Bennett Now Comptroller of Crown Zellerbach

A. L. Bennett, certified public accountant, was made comptroller of the Crown Zellerbach Corporation January 1. Mr. Bennett formerly was with Lybrand, Ross Brothers & Montgomery, San Francisco accountants and auditors. He will be located in the San Francisco offices of Crown Zellerbach.

THE FOREIGN MARKET

THE Republic of Peru, second nation of importance on the west coast of South America, has made considerable economic progress since the Panama Canal provided an outlet to Atlantic ports. It is a close to home market that has been but haphazardly developed.

The area of Peru is estimated at from 460,000 to



The plodding milk "carts" shown above are still characteristic in many parts of Peru. Note, however, the auto truck in the background. Below is shown a native woman, exhibiting an industrial bent by spinning wool as she walks. Observe the man in the background, reading the paper.

741,000 square miles, subject to boundary settlements, but it is only along a thin strip between the Andes Mountains and the Pacific Ocean that commercial activity exists. The Andes range divides the country into two sections and over half of the area is included in the tropical, little explored section east of the range. The population is placed at from 4,000,000 to 4,500,000 of which number 50% are native Indians, 15% are white descendants of Spaniards and 35% are Mestizos. There are also some 6,000 Europeans and

Americans. Half the native population is illiterate. Although Peru has a long stretch of sea coast she has but few harbors and at most of the ports cargoes are landed by lighters. Except for the Amazon River which furnishes a waterway from the eastern section to the Atlantic there are few navigable rivers.

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Agriculture and mining are the basic industries. About 90% of the population is dependent directly or indirectly on the soil. Cotton and sugar are the principal commercial crops. In 1926 the cotton crop exceeded 200,000 bales of 500 pounds each and the sugar crop was approximately 300,000 tons. The majority of the mines are operated by foreign capital and upward of 30,000 tons of bar copper, 20,000,000 ounces of silver and 125,000 ounces of gold are extracted annually. Peru is the second largest producer of petroleum in South America and production in 1926 exceeded 1,500,000 tons. Peru's total exports of all commodities in 1926 were valued at \$105,708,008.

Industrial Trend

There is a distinct trend in modern Peru toward industrialization. Increased manufacture of goods for local consumption is evidenced and the Peruvian government is lending every encouragement toward further development. Other signs of progress are the increasing numbers of natives qualifying as skilled operatives, projections of new transportation lines, and the definite establishment in 1928 of a protective tariff designed to protect national industry and to prevent further depreciation of currency.

Lima, the capital, is the nation's commercial center. It is a growing city of 200,000 population, situated eight miles inland from the port of Callao (75,000), with which it is connected by steam and electric trains and motor busses. The manufacture of cotton textiles is the principal industry. Upwards of 50% of the Peruvian imports pass through the Callao-Lima district and the standard of living here is higher than elsewhere in the country. Other important coastal cities are Arequipa, Talara, Salaverry and Paita. The average population is 30,000 in each.

Pulp and Paper

No pulp is manufactured in Peru. Two small boxboard mills operate on rags and waste paper and also use small quantities of imported pulp in the manufacture of cheap wrapping paper. Aside from this small output Peru is entirely dependent on foreign countries for her paper supplies.

The United States has dropped behind in exports to Peru. In a letter to the PACIFIC PULP AND PAPER INDUSTRY, O. C. Townsend, American Commercial Attache at Lima explains the position of the American

shipper as follows:

"As a result of the constantly increasing importation of low priced European paper into Peru, where the important consideration is price rather than quality, the United States has gradually lost the dominant place it formerly occupied in the paper market of this country. The value of the shipments in 1926 amounted to only \$238,000 in contrast with \$951,000 in 1919.

"Notwithstanding foreign competition, however, the United States still maintains the lead in certain specialties. About 80% of the coarse boards and building and roofing paper imported by Peru during 1927 was supplied by the United States. Approximately 65% of the blotting, filter and specially treated photography paper was supplied by American exporters, also 50%

The U. S. Bureau of Foreign and Domestic Commerce will be glad to answer specific questions relating to foreign trade. Address the nearest district office manager. Seattle, Wash.—Shirl H. Blalock, 820 Skinner Building. Portland, Ore.—James E. Peebles, 215 New Post Office Bldg.

San Francisco, Cal.—Wesley O. Ash, 310 Customshouse.
Los Angeles, Calif.—J. H. Smiley, 1163 So. Broadway.

of the carbon paper, 80% of the toilet paper and 80% of the adding machine and cash register rolls."

According to the United States Bureau of Foreign and Domestic commerce the European shipper has gained over the American exporter because of his willingness to produce the goods desired by the Peruvian customer and his greater attention to detail. There has also been a general complaint against the American method of shipping in wooden boxes. The European shipper uses tightly compressed iron strapped bales which are able to withstand the rough handling entailed in the loading from ship to lighters.

Railway and highway transportation facilities are inadequate for the country's needs. Because of this fact the American consulate at Lima advises that American firms refrain from granting exclusive sales or representation contracts to any firm unless they have investigated and found that the prospective connection can adequately cover the range of territory. It is also advised that separate agents be appointed for northern

and southern Peru.

Port Mellon Mill Lets Another Contract

Vancouver Kraft Co., Ltd., is proceeding with construction of its new mill at Port Mellon, Howe Sound, and has awarded the contract for the sawmill building to the Vancouver Pile Driving & Contracting Co., Van-

couver, B. C.

This contract, amounting to about \$25,000, is the second to be awarded to the Vancouver Pile Driving & Contracting Co. by the Howe Sound company, the former involving an expenditure of between \$65,000 and \$70,000 and covering the construction of a large lumber assembly wharf and foundations for the sawmill. It is expected that this part of the job will be completed

by early March.

Operation of the sawmill and production of pulp is to be resumed on the increased capacity basis in July, according to W. B. DuBois, vice president of the Columbia Paper company and secretary of the Vancouver Kraft Co., Ltd., who made a recent visit of inspection to the mill site. A digester building of steel frame construction with brick exterior is now being erected under contract by the Austin Construction Co. of New York and this will form a part of the remodeled pulp making plant. The mill will have an initial capacity of 100 tons of pulp daily, which will represent an increase of about 40 tons daily. The lumber will produce between 150,000 and 200,000 feet of lumber daily and all waste will be consumed by the pulp plant.

A large part of the output of the Vancouver Kraft Co., it is understood, will be taken over by the Bates Valve Bag Co., which is reported to be a large shareholder in the company. This part of the output will be used in the manufacture of paper cement bags for which there is a growing market in British Columbia.

Plans Paper Mill in Hawaii

A report from the Hawaiian Islands states that C. W. Mason is planning to construct a pulpboard mill at Hilo to manufacture board from bagasse. Mr. Mason has been the superintendent of the paper mill of the Olaa Sugar Co. in the Islands. This company, operating extensive sugar cane fields operates its own paper mill for the manufacture of mulch paper used in growing the cane crop. The cane stalks (bagasse) are used to make the mulch paper. Mr Mason expects to leave for the United States soon to arrange for machinery.

News Print Unsettled and Cloudy

Pacific Coast newsprint operators are still in a quandary regarding prices although they expect that a definite quotation will be fixed by March 15, probably on a five-year graduated basis.

Meanwhile the mills are selling at last year's prices although there is small chance of their being paid on

that basis.

"We are absolutely up in the air as far as prices are concerned," said an executive of one of the largest companies operating in the Coast newspraint fiield. Whatever is settled upon in the east will govern us here and we expect that the price will be about \$60 delivered in New York, the mills to absorb up to \$5 freight. Any of the mills on that basis will be selling at \$55 a ton, which barely covers cost of production in the best equipped plants. By making no allowance for overhead for a year, which is simply a book entry so far as single-year periods are concerned, it would be possible to pay bond interest, but not unless the mills get \$60 a ton or better will it be possible to pay dividends."

It is largely a question of turnover with most of the mills. A mill with a capacity of 500 tons daily can produce that amount as cheaply as 400 tons with allowance only for the larger amount of wood pulp used. Overhead remains the same. If there is a ready market for 500 tons even at a lower price it will pay these mills to produce at that low figure rather than the 400 tons. That point is held responsible for the action of International Paper in negotiating with Hearst on a \$50 basis. With a market assured for every ton it could produce, the company evidently felt justified in pro-

ducing at the low price.

Powell River Low Price Is Misquotation

Powell River Co. was recently quoted in Editor & Publisher, newspaper trade journal, as a price cutter and it was reported that the company had been selling newsprint at as low a figure as \$47 in Oklahoma. This figure, according to officials of the Powell River Co., should have been \$65 and claim the error was due to someone's mathematical miscalculation. "Powell River has a one-price policy," said George F. Steel, the New York news print broker who handles Powell River tonnage. "The price is based on the International Paper Co.'s charge from its Newfoundland mill to ports on the Gulf of Mexico, quoted now at \$60. We subtract from this a \$2 warehouse charge. Add to the resulting \$58 a ton the freight rates to Texas and Oklahoma points and the price becomes \$3.25 or \$65 a ton delivered.

Norwegian Paper Production at Capacity

Norway's paper industry was fully employed during 1928 with an output relatively the same as during the preceding year, according to the department of commerce.

The pulp mills were also fully occupied throughout the year, Commercial Attache M. H. Lund, Oslo,

cables

Output for export reached 404,000 metric tons, of which 132,000 tons represents bleached sulphite, 121,000 tone unbleached sulphite, and 26,000 tons sulphate. In addition, 125,000 tons of pulps were produced for home consumption.

Financial returns in the paper industry are reported unsatisfactory owing to the low prices. Relatively good prices, on the other hand, were obtained by the pulp

manufacturers.

New Types
New Models
New Machines

EQUIPMENT

Manufacturers of, and dealers in, equipment used by pulp and paper mills, board manufacturers, converting plants, paper merchants, or any other branch of the industry may make their announcements in this department. New Dealers
New Branches
Appointments

Fidalgo Suit Scheduled For May

Answers in the suit of R. D. Kehoe, president of the Technical Economist Corp., against the Fidalgo Pulp Mfg. Co. were being completed early in February and the case has been scheduled to come up for assignment in the Federal Court, Western District of Washington, on the second Tuesday in May.

R. D. Kehoe, represented by Seattle attorneys, Grosscup, Morrow & Wallace, is bringing suit against the pulp company to enforce delivery of U. S. patent 1668446 and Canadian patent 2725, together with all foreign rights on these patents, and to prevent the Fidalgo Pulp Mfg. Co. from wrongfully attempting use of these patents for its own purposes. Ossian Anderson is president of the Fidalgo company.

Noble & Wood Develops New Beater Stethoscope

Every trade develops its "tricks", which persevere till some one thinks of a better way of doing things. For example, it is not unusual to see a beater man grab what looks like a short piece of broom handle from its resting place beside the roll, jab one end against the beater, the other to his teeth, and tell you, if you're interested, just how the roll is brushing. An extremely simple device, effective in its way, but subject to many objections, not the least of which is the unsanitary aspect of passing the begrimed, stock-encrusted stick from mouth to mouth as succeeding beater crews take up their tours of duty.

This old, crude, unsanitary "bite-the-stick" method of judging beater operation is now made obsolete by the new beater stethoscope offered by the Noble & Wood Machine Co. of Hoosick Falls, N. Y. The beater stethoscope is simple, too, but far more effective, and certainly much cleaner than the stick method. The device is made of highly nickel-plated steel and consists of a series of rods connected by flexible ball and socket joints. At one end is a "listening ball". The opposite end is attached to the bed plate box, the vibrations of which are communicated through the rods and ball to the ear of the operator, exactly as a physician's stethoscope records the heart beats and breathing of a patient.

The stethoscope is easily attached and is always in position for convenient use. The jointed arrangement makes it instantly adjustable for men of all heights. No special skill or training is required to operate it. In fact, the brushing action of the roll can be checked with far greater certainty than by the old stick method. Beater men who have had an opportunity to use the new stethoscope are reported to be quite enthusiastic about it.

Hawley's Old Machine Shipped East

The 164-inch paper machine which was dismantled at the mill of the Hawley Pulp & Paper Co., at Oregon City, Ore., when the company installed a new 234-inch news machine early in 1928 has been shipped to the Atlantic Coast to be installed in a mill at York, Pennsylvania. There has been considerable speculation current on the Coast regarding disposition of the machine ever since it was taken out of production in March, 1928. One popular rumor that persisted for a time was that it was to be installed in the affiliated mill at St. Helens, Ore., the St. Helens Pulp & Paper Co., where kraft paper is manufactured. Shipment to the East was made in January.

Hardy S. Ferguson Enlarges Services

Hardy S. Ferguson, consulting pulp and paper mill engineer, who designed the new 120-ton sulphate pulp mill of the Union Bag & Paper Corp., at Tacoma, has enlarged his services and is now known as Hardy S. Ferguson & Co., Consulting Engineers. The address remains the same, 200 Fifth Ave., New York City. Mr. Ferguson is a member of A. S. C. E., A. S. M. E. and E. I. C. Associated with him are Moses H. Teaze, member A. S. M. E. and E. I. C., and J. Wallace Tower, member A. S. C. E. and A. S. M. E. The company offers consultation, reports, valuations and complete designs and engineering supervision for the construction and equipment of pulp and paper mills and other industrial plants, steam and hydro-electric power plants, dams and other hydraulic structures.

Stocks of Texrope Drives Enlarged

Because of the increasing demand for immediate shipments of transmission machinery, the Allis-Chalmers Manufacturing Co., Milwaukee, Wisconsin, has enlarged their stock of Texrope drives up to 50 h.p. This stock includes all the popular motor speeds and ratings with a large choice of driven speeds and a range of ratios from 1:1 to 7:1.

The manufacture of Texrope drives for stock has brought quantity production with consequent reduction in price. A catalog has been prepared to make selection of a suitable Texrope drive a simple matter.

Camachine Gives Long Service

After almost twenty years of continuous service a Camachine, employed in slitting and winding gummed tape, is reported by an eastern manufacture to still hold promise of some years more of service.

The Cameron Machine Co., Brooklyn, N. Y., has on record other such instances of record performances achieved by their sole product, slitting and roll winding machines, which they have been manufacturing since 1897.

Falk Transfers Western Office to Los Angeles

The Falk Corporation announces that it has closed its Portland office in the Terminal Sales Building and has relocated the headquarters of its Western Division in Los Angeles at 930 Rowan Building. John Jurgensen has been in charge of the Portland office and is now at Los Angeles.

Westinghouse Increases Advertising Program

A greatly expanded program of advertising for 1929 in the technical, trade and business publications is planned by the Westinghouse Electric & Manufacturing Co., according to a statement issued by J. C. McQuiston, general advertising manager of the Westinghouse com-

oanv.

"The increase," states Mr. McQuiston, "in the number of products from year to year which we manufacture has made it advisable for us to change our technical advertising to keep step. Leading industries are now so thoroughly electrified that each one offers a market for a large variety of our products. In order to meet this situation, in addition to our usual advertisements covering a single product, we plan to make extensive use of group advertisements in which we will call to the attention of the executives in an industry the whole line that Westinghouse is equipped to offer that industry.

"Furthermore, I am convinced that in our technical advertising not enough attention has been paid to telling the industries a more complete story of Westinghouse service and for this year we will present a number of broad institutional messages in the technical

magazines.

"Our advertising policy aims always to expand the electrical industry by informing the public continually of the vital part that electricity plays in modern civilization. We aim also to be of direct service to the distributors of electrical products by direct advertising cooperation with such distributors."

B. C. Experiments With Mulch Paper

Increasing use of mulch paper in Western Canada is inducing British Columbia pulp mills to embark on the production of this material. Sidney Roofing & Paper Co. is now manufacturing it at its Victoria plant and other mills will follow.

The Dominion Experimental Station at Sidney, Vancouver Island, B. C., established in a recent test that the use of mulch paper will increase the yield from cantaloupe plants by 250.8 percent. Other tests showed an increase of 73 percent in the yield from potatoes, 409 percent in the yield from a beet plantation and an even greater percentage in the yield of cucumbers.

The government experimental stations will continue their tests with a view to ascertaining the full extent of the benefits to be derived from the use of mulch paper.

Quote New Freight Rate on Pulp to Midwest

That interest has not waned in the possibility of shipping Coast pulp to the paper mills of Ohio and other Midwest points by the Gulf route is evidenced in the approval by the carriers late in January of new low allrail rates from shipside New Orleans to Cincinnati and St. Louis points. The new rate has not yet been published, but has been approved by the carriers, quotes a 33c rate to Cincinnati territory and 39c to St. Louis. With a minimum ocean rate of \$6 per ton now prevailing from Pacific Coast points to New Orleans, a possible through rate of \$12.60 may be quoted. This compares with the all-ail rate from Pacific Coast to Ohio points, recently published, of 65c, or \$13 per ton.

A discussion of the possibility of shipping Pacific Coast pulp to Midwest paper mills was published in the October, 1928, number of PACIFIC PULP & PAPER INDUSTRY, in an article entitled "By Water to the Pulp Market." A number of comments on that article

were received. Meanwhile interested agencies, which include steamship lines plying between Pacific Coast points and New Orleans, rails terminating at New Orleans, the Federal Barge Line, civic organizations and others have given the Coast-to-Gulf pulp movement further study. A letter from Col. Thos. B. Esty, Pacific Coast Representative of the Federal Barge Line, received early in February, reports a continued interest in the route, this interest going back to the heads of the service in Washington and New Orleans.

That the new all-rail rate quoted from the Gulf does not solve the problem is pointed out by some Pacific Coast men who are shipping pulp. For those mills located on deep tidewater where direct ocean loading can be accomplished, the new rate will enable some saving, but to other mills which must tranship to tidewater docks the handling, insurance and other charges

will prevent taking advantage.

Another factor to be overcome is the slowness of the Gulf route. All rail from the Coast to the Midwest mills takes only one-third the time of the shipment going via New Orleans and transhipped from there. With a fluctuating pulp market this element would be most important, to say nothing of the greater capital tied up in the long-time shipment.

The New Orleans route must, of course, compete with Atlantic port back hauls, and with 32c and 33c now being quoted by some carriers from Baltimore to Ohio points, it follows that every question has not yet been

answered.

However, the rates just quoted are not necessarily end rates. Luckenbach steamship men and others are reported working hard to build up a pulp movement from the Coast via the Gulf, and the fact that the southern railroads have made an offer indicates the increasing interest they are taking in Pacific Coast pulp as an important commodity.

Ships Call Regularly at Longview

Five American-Hawaiian steamers during January and the first week of February loaded cargos of fibreboard and paper at the Port of Kelso docks in Longview, manufactured in the plant of the Longview Fibre Co. Each ship took between 600 and 700 tons of board and paper. Two McCormick coastwise ships, the Wallingford on January 9, and the Munami January 29, each took about 50 tons of similar cargo for San Francisco.

Freeze-Up Shuts Down Ocean Falls

The news print mill of the Pacific Mills, Ltd., at Ocean Falls, B. C., shut down in January owing to the shortage of water during the recent cold spell. Operations, except in the kraft mill, which is working on a regular basis, have been completely suspended.

Victoria Mill Wins Railway Concession

A delegation representing Victoria business interests and headed by R. W. Mayhew, managing director of the Sidney Roofing & Paper Co. succeeded in getting from the Dominion Board of Railway Commissioners an order compelling the Esquimalt & Nanaimo Railway and Canadian National Railways to provide interswitching facilities on the industrial reserve. This will enable the Sidney Roofing & Paper Co. as well as other industries to make more advantageous use of the car ferry system now operating between the inner harbor at Victoria and the big freight assembly docks at Ogden Point where ocean ships take on cargo.

Zellerbach Sacramento Division Opens New Bldg.

Mr. Leland J. Doherty, manager of the Sacramento division of the Zellerbach Paper Co. has announced their formal opening on February 16,1929, a new building which is located at 1213 Front Street, Sacramento. The move into this modern four floors and basement building is done to better serve Zellerbach friends and customers in the Sacramento territory.

The building has been carefully planned in every detail to provide ideal working conditions for employes as well as to give the most effective display of various items of merchandise sold by the company.

Here are some of the building's features:

General offices: Includes, manager's office; dispatch station with private branch exchange where complaints or adjustments are made and orders dispatched; credit authorizer, available to customers and to general sales department at all times; billing department with new mechanical billing and book keeping machine; filing department, efficiently arranged for ready reference to orders, invoices, correspondence, etc.

Sales Department: Includes sample display room with large display tables, display racks and cabinets for convenience in showing samples of the many items of paper, paper products, stationery and notions.

A new service department called the Advisory Department is installed, where will be found printed specimens of high grade work, booklets, catalogs, folders, blotters, direct by mail advertising pieces and campaigns produced by local printers in the Sacramento territory, and also, specimens produced throughout the United States on papers that are distributed by the company. A complete dummy service is offered to

Principally Newsprint from Newfoundland.

printers and advertisers who are planning advertising mailings. This service consists of samples and dummies of any paper furnished gratis to the customer. The catalog and sample room is maintained with up-to-theminute records of price changes, quotations, new lines, etc.

Operating Department: Storage facilities are properly planned with bins, and arranged for speed in handling orders and for the protection of stock.

Delivery Department: Consists of a loading platform in the rear of the building, avoiding confusion with incoming merchandise and the general offices. A separate country shipping department and a convenient waiting vestibule for "will call" customers.

Special Equipment: This includes every modern facility, such as pneumatic dispatch tubes to all departments, signal bells, elevators, gravity chutes, dumb waiters, thermostatic furnace, electric refrigerator, iced water at all times for customers, and customers lavatory.

The division manager, Mr. Doherty, has extended a general invitation to the company's friends and customers to visit and inspect the new building.

The representatives of the Sacramento division cover the state of California from the Oregon line to southern mines district as well as the state of Nevada.

Fox River President Visits Coast

William C. Wing, president of the Fox River Paper Co., came west at Christmas time to see his new grand-daughter, the baby daughter of Mr. and Mrs. Mason C. Olmsted. Mr. Olmsted is with the Zellerbach Paper Co. at San Francisco and his wife is Mr. Wing's daughter.

PACIFIC COAST IMPORTS-NOVEMBER, 1928

	Pulpwood		Mechanically Ground Pulp		Bleached Sulphite		Unbleached Sulphite		Unbleached Sulphate	
	Dollars	Cords	Dollars	Tons	Dollars	Tons	Dollars	Tons	Dollars	Tons
To LOS ANGELES— From Sweden					*******	*****	************	-4	68,630	1,500
To OREGON— From Sweden To SAN FRANCISCO—	*******		*******	*****	******	*****	*******	*****	1,579	686
From Canada	******	*****	5,960	202	*****		32,978	700	13,568 14,556	300
From Finland	******	*******	9,935	500	*******	*****	32,970	700	14,770	
From Canada	13,651	2 220	2,082	238	11,248	155	4,681	92	*******	
Totals	13,651	2,220	17,977	940	11,248	155	37,659	792	98,333	2,71

PACIFIC COAST IMPORTS-NOVEMBER, 1928

		Newsp	rint	Printing	Papers	Wri	ting	Greas	eproof	Wra	pping	Tisc	sues
		Dollars	Pounds	Dollars	Pounds	Dollars	Pounds	Dollars	Pounds	Dollars	Pounds	Dollars	Pound
To LOS	ANGELES-												
From	Canada	96,360	314,998	*******	###W####	*******	******	******	*****	*****	*******	*******	
From	Sweden	65,029	2,399,328	******	*******	*******	*****	*****	*****	2,451	59,809	******	
From	Germany	653	21,510	*****	-	305	580	*****	******	******	******	******	*******
	Austria	*********	********	191	300	369	764		*****	******	*******	******	
From	France	*********	*******	********	*********	699	1,221	******	*****	******			
From	Orient	***********	***********	149	92	545	505	******	*****	*******		1,146	1,965
To OREG	ON-												
From	Norway	580	20,574		*******	*******		*****	*****			******	*******
From	Finland	***********	*********	1.327	11,934	*******	******		*****	******	*******	******	*******
From	France	***************************************	***********			78	190	*****	******		******	*******	
From	Orient		************	*******	******	64	446	******		4	13		******
	All Others*	193,514	5.968.815	900	18,776	********	*******	******	*****		*******		*******
	FRANCISCO-		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		,								
	Canada	220,956	6,643,227	*******			*******						
From	Sweden	69,316	2,607,292		********	*********			******			*******	*******
From	Germany		-,,	1,326	1,564	1,488	6,285			981	1,363	310	1,389
	France	************		-,		1,500	3,458	*****	******		********	*******	*******
From	Austria	***************************************		653	1,653	259	470	******	******	*******	*****	*****	Ber san
From	Orient	**********	***************************************	672	347	1,029	2,834	******		25	145	466	507
	HINGTON-												
From	Canada	435,644	12,876		********	43	164						
	Germany			*******	********	197	534				*******	*******	******
	France		***********	********	********	214	140	******		********	********	********	*******
From	Austria			********	*******	29	73	******		*******	********	********	******
	Orient		**********		*******	83	115	******		9	100	47	180
. tom	Orient												
T.	tals	1.082.052	17,988,620	5,218	34,666	6,902	17,779			3,470	61,430	1.969	4.04

Indians Help Reforest Pulpwood Lands

If, when driving through the heavy timber of the Olympics, you see some Indians gathering Sitka Spruce cones you can set them down as assistants in the job of keeping those Olympic hills forever green with timber.

The Washington Pulp & Paper Corp., of Port Angeles, Wash., buys those spruce cones at \$1.25 per sack to seed some of its cutover lands and its forest nurseries in western Clallam county, situated on the somewhat famous Quillayute prairies. The paper company expects to get every acre of its cutover lands working again on a new crop of pulpwood without delay and anticipates a second harvest of wood in 30 to 35 years.

Let Chris Morganroth, a practical forester who has knocked about in the Olympics for about 40 years, and now engaged by the paper company in reforestation work, tell you some more about this work:

"Indians search the woods in October and November for the ripe spruce cones. We pay them \$1.25 a sack. The cones are placed in a drier, and the seeds shaken out of them. These seeds are planted in our nursery, and after three years will be placed on cutover land of the company. In 30 to 35 years merchantable pulp

timber will be available again. Each sack of cones produces about two pounds of pure spruce seed."

Explaining natural reforestation progress on Quillayute prairie, in Clallam county, Mr. Morganroth said: "Thirty-five years ago a certain part of the prairie was ploughed land. Last year our company cut from that area 68 trees from one-quarter of an acre, and netted thirty-two and one-half cords of wood. That proved to us that the area would produce three crops of pulp timber in one hundred years.

"The company has already planted 20,000 small trees, and expects to be able to plant at least two trees for every one cut for present needs."

Cold Weather Forces Brief Shutdown

The Woodfibre plant of the B. C. Pulp & Paper Co. was closed down for a brief period last month owing to shortage of water due to freezing. The company has been able to avail itself of the new tunnel built to tap Henrietta Lake and provide a new source of water for the mill. The tunnel is not yet completed, but the bore is sufficient to be of some use to the company in getting a flow of water from the lake.

PACIFIC COAST EXPORTS—NOVEMBER, 1928

	s Print	Be	ook	W	riting	Greas	eproof	Wr	apping
Dollars	Pounds	Dollars	Pounds	Dollars	Pounds	Dollars	Pounds	Dollars	Pounds
From LOS ANGELES—									
To Mexico	**********	130	1,011	28	121		********	3,297	46,816
To Canada	************	*******	*******	41	110		********	-,,	
To Australia			********		*******	******	*******	5,160	65,170
rom OREGON								,,,,,,,	02,127
To Brazil	*************		*******	1,450	31,332		********		*******
To Australia		********	*******	9,838	204,040		********		
To Philippines20,421	532,677	614	10,176	1,678	34,444	********		20,157	467,911
To Orient31,075	934,408	647	11,577	4,852	102,668	-	********	31,781	731,586
rom SAN FRANCISCO-	,		,	.,	,			22,702	,,,,,,,,
To Canada	**************	144	1,035	453	2,471	*	****		******
To Mexico	***********	********	********	2,670	46,519	94	674	300	4,260
To Colombia	************	416	8,498	1,537	31,658				*******
To Venezuela		109	1,449	250	3,857				
To Central America 130	10.000	7.133	136,008	2,689	53,987	*****	*******	52	260
To Australia		312	2,570	170	461	*****	******	415	6,331
To Philippines	***********		-,,,,	2,0		428	3,365	1,953	36,953
To Orient	*************	710	3,377	1,832	19,570	18	168	1,656	13,813
From WASHINGTON-		,	-,	2,000	.,,,,,		100	1,070	23,023
To Philippines 3,430	114,303	19,458	357,506	72	318			1,455	41,223
To Canada		4,008	51,088	253	2,111	208	1,595	2,056	62,448
To Orient	************	4,770	79,490	1,959	2,935			146	2,032
		1,1,70	, 17.0	*12.22	-,727			140	2,002
Totals55,056	1,591,388	38,451	663,785	29,772	536,602	748	5,802	68,428	1,478,803

PACIFIC COAST EXPORTS—NOVEMBER, 1928

	Tis	sues	Box	Board	Other Paper & Strawboard			Pape	r Bags	Boxes & Cartons		
	Dollars	Pounds	Dollars	Pounds		Dollars	Pounds	Dollars	Pounds	Dollars	Pounds	
From LOS ANGELES-												
To Mexico	553	3,903	1,972	68,000		39	650	105	1,070	12	26	
To Australia		*******	485	16,915			********	**********			*******	
To Philippines		********	********	*******		******	**********			45	380	
From OREGON-												
To Philippines		*******				********		2,445	39,006	********		
To Orient			1,617	70,600		******	********	********	********	*******		
From SAN FRANCISCO-												
To Canada	. 108	671	376	1,699		67	925	*******		*******		
To Mexico	143	886				*******		6,038	63,884	18	88	
To Denmark			*******	*******		********	********	-,		37	228	
To Norway		******				*******			********	15	117	
To Central America	321	3,595	3.095	105,862		275	7,000		********	19	86	
To Colombia		287					,,000		********		-	
To Venezuela	10	90	-	********		********	********		********		******	
To Other S. America		#0000000	162	5,000			********		********		*******	
To Philippines	120	1,020	240	6,400		*******	*******	9,270	2,504	1,641	25,886	
To Australia		.,	10,210	373,188		222	274	2,=70	-,,,,,,,	608	400	
To Orient	977	12,408	5,947	189,166		524	4,092	232	3,517	7,566	153,554	
To All Others		********	782	15,500			********		********	.,		
From WASHINGTON-										*********	********	
To Canada	1,100	8,328	3,566	108,844		401	5,695	22	186	2,427	53,469	
To Philippines		14,780	2,886	49,049			.,			-,	22,10	
To Orient	496	5,212	*******			282	1,967	60	390	*******	******	
Totals	3,988	51,180	31,338	1,010,223		1,810	20,603	18,172	110,557	12,388	234,228	

Washington shipped 394 tons (\$29,031) of sulphite wood pulp to Japan. Washington shipped 111 tons (\$\$73) of other wood pulp to Canada. Washington shipped 1410 tons (\$\$7,722) of other wood pulp to Orient. Washington shipped 65 tons (\$2,948) of other wood pulp to Italy.

Paper Production for November

The total paper production in November, according to identical mill reports to the American Paper and Pulp Association, was 599,102 tons as compared with 617,391 tons in October and 546,946 tons in September. The eleven months' production total for 1928 was 6,413,225 tons against 6,228,269 tons in 1927, an increase of three per cent.

Newsprint, hanging, felts and building paper were the only grades whose eleven month totals were running behind a year ago. Book, paperboard and tissue production at the end of the eleven months, was running 6% ahead of the same period in 1927. Bag and writing papers were both running about 4% ahead of the eleven months of 1927. Total stocks on hand at the end of November were about 9% larger than at the end of November, 1927.

Identical pulp mill production reports to the Amererican Paper and Pulp Association in November totaled 219,771 tons against 214,347 tons in October and 184,173 tons in September. The eleven month's total for 1928 was 2,294,719 tons against 2,302,767 tons in the same period of 1927, a decrease of about 1%. Stocks on hand at the end of November were about 19% less than at the end of November, 1927.

The November daily average pulp production was about 11% better than that of October and 5% better than that of November, 1927. The daily average paper production in November ran about 5% ahead of October and about 7% ahead of November, 1927. The November daily average production for all the individual grades of paper, except felts and building papers

which ran 21% below the October level, was above the previous month.

COMPARATIVE REPORT OF PAPER OPERATIONS IN IDENTICAL MILLS FOR THE MONTH OF NOVEMBER, 1928

GRADE	Production	Shipments Tons	Stocks on Hand End of Month— Tons
Newsprint	123,785	122,880	34,691
Book	94,559	93,468	54,616
Paperboard	229,260	227,493	47,999
Wrapping	*52,012	*49,981	*55,278
Bag	15,976	15,401	5,785
Writing	30,734	30,091	43,516
Tissue	13,869	13,926	10,963
Hanging	5,858	6,283	2,974
Felts and Building	6,369	5,912	2,767
Other Grades	26,680	26,369	18,837
Totals-All Grades	599,102	591,804	277,426
*Subject to revision			

COMPARATIVE REPORT OF WOOD PULP OPERATIONS IN IDENTICAL MILLS FOR THE MONTH OF NOVEMBER, 1928

Production Tons	Used During Month—Tons	Shipped During Month—Tons	Stocks on Hand End of Month— Tons
Groundwood 96,258	91,168	3,370	78,538
Sulphite, News Grade 39,166	36,324	2,148	9,200
Sulphite Bleached 26,017	23,281	2,484	2,658
Sulphite Easy Bleaching 3,378	3,023	341	655
Sulphite Mitscherlich 6,846		1,148	1,455
Sulphate Pulp 24,800	19,237	5,332	4,416
Soda 23,241	15,149	7,991	5,805
Pulp-Other Grades 59		134	22
Total-All Grades219,771	194,003	22,948	102,749

IMPORTS OF PULP WOOD AND WOOD PULP INTO THE UNITED STATES BY COUNTRIES

OCTOBER, 1928

Compiled by the U. S. Department of Commerce, Bureau of Foreign and Domestic Commerce (Figures Subject to Revision)

		Rot	ugh		PUI	P WOOD	eled			Ro	ssed ——	
	Cords	Dollars		her Dollars	Cords	Dollars		Dollars	Cords	ruce Dollars		ther Dollars
COUNTRIES- Canada Newfoundland &	21,954	230,651	2,162	14,798	56,638	733,883	12,378	119,313	4,185	45,995	41	356
Labrador		*******	******	******	2,945	47,120	*******	*****	*****	******	***	*****
Total	21,954	230,651	2,162	14,798	59,583	781,003	12,378	119,313	4,185	45,995	41	356

				wc	OOD PULP							
	Mechanically Ground		ound Sulphite Sulphite		hite	Chemical U Sulpl	ate	Sul	al Bleached	All Other Wood Pulp		
	Tons	Dollars	Tons	Dollars	Tons	Dollars	Tons	Dollars	Tons	Dollars	Tons	Dollars
COUNTRIES—												
Austria		*******	*****		277	20,358	8	***********	******		*******	
Czechoslowskie			127	6,768	338	17,010	0	**********	*******			********
Estania	*******	******	1.160	54,321								
	1.159	25,624	8,069	353,526	118	6,486		109,909	438	33,486	100	5,828
	1,179	27,024							420	22,400		
Germany			2,422	127,302	4,402	301,444	4 276	13,952	-		20	3,728
Lithuania		*****	48	2,585	*******	*******		*********	*****	*****	-	****
Norway	150	1,901	2,190	192,705	4,263	318,823	3 1,221	67,857	*******	***********		-
Poland and Danzig	*******	********		***********	********	Commen	130	6,189	****	*******		
Sweden	474	20,118	36,571	1.977,457	1,869	132.051		970,748	2,600	139,142	*****	
United Kingdom	200	2,532			_						1	3.8
	200	4,774	406	20,348	***********	*******		************		*********		20
Yugoslavia & Albania			496		16 006	1 000 030		m 42 000	200	0.000	***	24 610
	9,342	489,396	15,533	722,335	16,276	1,268,838	8 11,943	743,022	300	25,298	414	31,518
Cuba				********	******			****	-	******	1	121
_									-	-	-	
Total 2	1,325	539,571	66,616	3,457,347	27,543	2,065,010	0 35,103	1,911,677	3,338	197,926	536	41,233

Total Imports of all Grades of Pulp for October, 1928-154,461 tons; \$8,212,764.

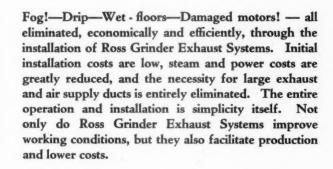
Hawleys Again In U. S.

Mr. W. P. Hawley, Sr., accompanied by Mrs. Hawley and their granddaughter, Eva Adele Hawley, daughter of Mr. Willard P. Hawley, Jr., arrived in New York from Europe in the closing days of January. After visiting in Washington, D. C., they re-

turned to their home in Portland. Miss Adele, who is not yet twelve summers old, has perhaps done more traveling than any girl her age in the country, having been with her grandparents in Europe several times and to the Orient. Mr. Hawley is always glad to get back to Oregon City, among his employes, many who have worked for him for many years.



For magazine and pocket grinders



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ROSS ENGINEERING OF CANADA, LIMITED
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Canadian Exports of Pulp and Paper, December, 1928

Increasing dependence of the United States upon Canada for its pulpwood and paper supplies is shown in the complete tabulation of Canadian exports of these products for the year 1928. While the United States import figures are not at this time available to check against the Canadian figures, the Canadian exports are, nevertheless, an excellent index of United States imports since the latter nation is Canada's principal customer. Total Canadian exports of paper reached \$147,156,792 in 1928, showing an increase equivalent to nearly one and one-half million dollars a month over the 1927 figure. Newsprint and wrapping exports showed marked increases, but other grades fell off.

A study of the comparative exports of the different grades of pulp between the years 1927 and 1928 is interesting. Mechanical pulp fell off heavily in tonnage and even greater in total value, due to the poor market for this grade and the march of newsprint across the international boundary. On the other hand, both bleached and unbleached sulphite pulps showed good gains over 1927, although the value did not advance in proportion, due to falling markets. Sulphate pulp fell off, a fact attributable, no doubt, to the recent activity in the Southern United States and on the Pacific Coast in building kraft mills. Export of screenings nearly doubled. This should be accepted as a healthy sign, indicating a closer attention perhaps to elimination of hitherto waste and a step toward closer utilization.

Pulpwood exports also showed a decline.

The official report of the Canadian Pulp & Paper Association states that the exports of pulp and paper from Canada in December were valued at \$18,014,627, which was an increase of \$1,147,098 over the previous month and of \$2,688,691 over December, 1927.

December exports of wood-pulp were valued at \$4,102,676 and exports of paper at \$13,911,951, as compared with \$3,856,257 and \$13,011,272, respectively,

in November.

Details for the various grades of pulp and paper for December, 1928 and 1927, are as follows:

	Decen	aber, 1928	Decer	nber, 1927
PULP—	Tons	Dollars	Tons	Dollars
Sulphite Bleached	19,980 21,860 19,718 14,356 3,525	535,643 1,671,296 990,720 850,674 54,343	20,273 18,866 17,295 14,866 2,465	567,128 1,430,912 868,369 892,972 53,265
PAPER	79,439	4,102,676	73,765	3,812,646
	13.162	13,808,647	169,202	11,078,887
Wrapping	1,475	154,041	931	100,590
Book (cwts.)	6,435	49,568	5,229	38,019
Writing (cwts.)	668	6,843	1,268	11,960
All Other	*****	292,852		283,834
		13,911,951	********	11,513,290

For the year 1928 there was an increase of \$16,168,316 in the value of wood-pulp and paper exports as compared with 1927, the total for the year being \$192,771,615 as against a total of \$176,603,299 in the preceding year.

Wood-pulp exports for the year were valued at \$45,.614,823, which was a decline of \$1,381,188 from the 1927 total of \$46,996,041.

Exports of paper for the year were valued at \$147,-156,792, as compared with \$129,607,258 in 1927, an increase for the year of \$17,549,534 and a new high record.

Quantities and values for the year were as follows:

	Yes	r. 1928	Year	1927
PULP-	Tons	Dollars	Tons	Dollars
Mechanical	203,670	5,546,120	260,831	7,761,464
Sulphite Bleached	251,543	19,112,964	237,228	18,407,169
Sulphite Unblchd	214,127	10.738.977	192,559	10,269,560
Sulphate	162,772	9,595,866	169,691	10,193,307
Screenings	31,694	620,896	18,846	364,511
PAPER—	863,806	45,614,823	879,155	46,996,011
Newsprint 2	2,206,587	141.103.527	1.881.867	123,222,094
Wrapping	16,062	1,755,652	114,092	1,583,928
Books (cwts.)	71.802	588,671	99,870	690,680
Writing (cwts.)	6,892	58,600	15,357	124,787
All Other	****	3,650,342	****	3,985,769
		147,156,792		129,607,258

Pulpwood exports in 1928 amounted to 1,532,266 cords valued at \$16,269,660, as compared with 1,541,769 cords valued at \$15,702,705 exported in 1927.

Plywood Shipped In Cartons

And now, plywood in a carton!

There was a time when the Pacific Coast Plywood Mfrs., Inc., dispatched each order of their product, plywood, with no little worry least the shipment reach its destination with corners battered and with surfaces scarred by handling.

But that time is past, for now, the plywood companies, ship their boards in fibre cartons which assure that the delivered order will be free from scratches, dirt and other blemishes.

Plywood is a special splitproof, three-ply wood board for finish work. The trade name of the product made from Douglas fir by the Pacific Coast Plywood Mfrs., Inc., Seattle, Wash., is "Pa-Co Fir Plywood". Mills of the company are located at Seattle, Everett, Olympia and Portland.

Ten Billion Feet of Lumber Cut in 1928

The production of lumber during 1928 in the Douglas fir region of Oregon and Washington totaled approximately 10,141,286,000 board feet, according to tentative figures from a first-hand study just completed by the West Coast Lumbermen's Association and an-

nounced to the stockholders of the lumber organization at the annual meeting in Tacoma, on January 25. Of this total, Oregon produced 3,584,292,000 board feet, and Washington 6,556,994,000 board feet. Six hundred and seventy-eight mills were included in the survey as active producers during the year.

Douglas fir, West Coast hemlock, Western red cedar and Sitka spruce are included in the totals. By districts, the production was as follows:

OREGON

Medford	
Coos Bay, Marshfield and vicinity	341,179,000
Willamette Valley	
Yaguina Bay, Toledo and vicinity	179,099,000
Tillamook	405,414,000
Columbia River	1,617,119,000
Total	3,584,292,000
WASHINGTON	
Columbia River	671,113,000
Willapa Harbor	178,723,000
Centralia-Chehalis	
Grays Harbor	1,324,126,000
Tacoma	1,153,458,000
Seattle	1,188,925,000
Everett	
Bellingham	577,710,000

Total

6,556,994,000



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December News Print Production And Comparative Yearly Reviews

Production in Canada during December, 1928, according to The News Print Service Bureau, amounted to 208,484 tons and shipments to 215,133 tons. Production in the United States was 115,049 tons and shipments 115,033 tons, making a total United States and Canadian news print production of 323,533 tons and shipments of 330,166 tons. During December, 18,674 tons of news print were made in Newfoundland and 1,724 tons in Mexico, so that the total North American production for the month amounted to 343,931 tons.

Adding to the production of the regular news print mills reporting monthly throughout the year, the small amount made by mills whose product is chiefly other grades, the total North American output of news print paper in 1928 was 4,043,780 tons, of which 2,381,102 tons was made in Canada, 1,414,952 tons in the United States, 230,745 tons in Newfoundland and 16,981 tons in Mexico. The Canadian output was 14 per cent more than in 1927, that in the United States 4.8 per cent less, with a gain of 13.7 per cent in Newfoundland and 20 per cent in Mexico, making a total increase of 254, 347 tons, or 6.7 per cent.

During December the Canadian mills operated at 84.3 per cent of rated capacity and the United States mills at 83.7 per cent. Stocks of news print paper at Canadian mills totaled 19,139 tons at the end of December and at United States mills 34,469 tons, making a combined total of 53,608 tons, which was equivalent

to 3.5 days' average production.

				PRODUCTION —				STILL	MEIAID	SHIPMENTS-		
				verage Tons Per Day	Actual Tons Per Month	Actual Tons Per Operating Day	Per Cent Actual To Average (Totals Per Month)	Tons Per Month	Per Cent of Average Production	MILL		
					CANADIAN	MILLS						
1928—D	ecemb	200		9.897	208,484	9,216	84.3	215,133	86.9	19,139		
				2.381,102	8,485	82.0	2.399.030	82.6	19,13			
1927—	66 .		***************************************		2,086,949	7,236	85.1	2,062,749	84.2	38,11		
1926—	9.9		***************************************		1,881,737	,,,,,,,,		1.878.746		14,34		
1925-	0.0	6.0			1,522,217	*******		1,525,150		18,41		
1924—	8.0	0.0			1,352,994			1,344,757		21.95		
1923-	99	9.9	***************************************		1,266,232	******	****	1.257.521		15.12		
	9.9	9.9				******	*****	1.087,572	***	7,57		
1922—	44				1,081,916	*****	*****		****			
1921-	**	**		******	808,066	******	*****	803,162	****	13,89		
				U	NITED STATE	ES MILLS						
1928-D	ecemb	er		. 5,495	115,049	4.757	83.7	115,033	83.7	34,46		
		Months			1,414,952	4,779	81.8	1.397.393	80.8	34,46		
1927-	44	64			1,485,495	4,931	83.1	1,474,521	82.5	20.87		
926-	9.9	99			1,684,218			1,684,790	0217	12.03		
925-	2.0	44			1,530,318	********	*****	1.534.345		16.23		
	**	9.0	***************************************			****	*****		*****			
1924—	99	99	****************	-	1,481,425	****	*****	1,480,819	*****	23,7		
1923	99		***************************************		1,485,000	******	*****	1,477,332	*****	23,60		
1922-			***************************************		1,447,688	******	*****	1,452,414	MARKET.	19,20		
1921-	44	46			1,225,235	*****	40.000,000.000	1,226,064		23,93		
				UNITED S	TATES AND	CANADIAN N	AILLS					
1928—December				15.392	323,533	13,973	84.1	330,166	85.8	53,60		
T	welve	Months			3.796.054	13,264	81.9	3,796,423	81.9	53,60		
1927-	6.6	44			3,572,444	12,167	84.3	3,537,270	83.4	58.99		
1926-	9.9	44			3,565,955			3,563,536		26.3		
1925-	9.9	**	***************************************		3,052,535	******		3,059,495		34.6		
1924—	22	9.9	********************************	********		*******	****	2,825,576		45.7		
	**	9.9	***************************************		2,834,419				****			
1923—	**	99	***************************************		2,751,232		****	2,734,853	*****	38,7		
1922-	**	44	***************************************		2,529,604	******	(0.00,00.00,00.00)	2,539,986		26,7		
1921—	**	**	**		2,033,301		*****	2,029,226	****	37,8		
				NORTH	I AMERICAN	PRODUCTION	N					
				Canada	United	States	Newfoundland	Mexico		Total		
				208,484	115,049		18,674	1,724		343,9		
Twelve Months			2,	381,102	1,414,952		230,745	16,981		4,043,78		
1927-	44	66	2	086,949	1,485	.495	202,852	14,137		3,789,4		
1926-	8.0	2.2	1		1,684	.218	186.471	13,412		3,765.8		
1925-	**	9.9	1		1,530		96.588	12,681		3,161,8		
1924-	9.9	66		252 004	1.481	425	64.648	11,500		2.910.5		

News Print War Benefits Coast Mills

The cloud which has hung over news print circles for some months now is interpreted by Manheim, Dibbern & Co., a San Francisco financial house, as being good news for Pacific Coast mills. In a statement made late in January it was said:

"The price war that has existed in the East between the various paper companies was settled last week, according to information received here, and a basic price of \$55.00 per ton for newsprint has been agreed upon.

"This is a most satisfactory situation as far as Crown Zellerbach is concerned, for the company has been able to show substantial earnings in spite of the fact that the industry has been depressed.

"With the increase in newsprint agreed upon, Crown Zellerbach's earnings should mount considerably above the satisfactory figure that the year 1928 is expected to show.

"The common stock around 2234, paying \$1.00 per share, appears to have one of the best speculative

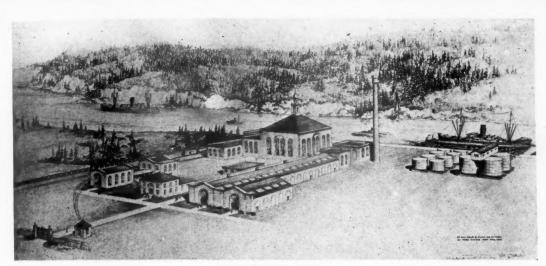
features on the local board, from an analytical standpoint, and the probability of an increase in dividends before many months have passed, is one that should lend interest to the purchase of the stock from an income standpoint.

"The new issue of preferred stock which is being sold to the public at the present time has much merit and in time should sell at the attractive levels that the original Zellerbach preferred reached two or three years ago."

W. F. Waterbury Dies

William F. Waterbury, president of H. Waterbury & Sons, Oriskany, N. Y., died on January 16 after a lingering illness. Mr. Waterbury was born in Rensselaerville, N. Y., in 1876.

After his graduation from Cornell University Mr. Waterbury entered the firm of H. Waterbury & Sons Co., where he had been connected in an executive capacity for more than 20 years. He became president of the company in 1917 on the death of his father.



TACOMA PLANT

Hooker Electrochemical Co.

- ANNOUNCES -

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EASTERN

SALES OFFICE—25 Pine St., New York City PLANT—Niagara Falls, N. Y.

S · A · F · E · T · Y FIRST-LAST and ALWAYS

The Best Safety Device Known Is a Careful Man

Safety Contest Completes Full Year

The pulp and paper mills of Washington have just completed their first year of safety contest work. While it can not be said that accidents are now a thing of the past and that all that remains to be done is to lay back on the oars and bask in the glory of past conquest, the fact is that the safety contest has been a stimulating element in safety first work. The contest served a principal purpose, the purpose which is the all-important one in safety work and that is "keep the safety idea everlastingly to the front."

During 1929 several new mills which came into production during will report their accident experience and help along the cause. The year just closed has demonstrated some points that might be improved upon in reporting accidents to obtain a more equitable comparison. Consequently in reporting the 1929 accident experiences a slight change is to be made. These changes are set out in a letter addressed to the different Washington mills by W. J. Pilz, manager of the Everett Pulp & Paper Co., who has been tabulating the reports:

"In the past, we have been computing our accident figures on the basis of the number of days lost per one thousand man days. We have made no attempt to weigh the serious accidents such as deaths and those which cause permanent partial disability. Accordingly, a company which has a large number of serious accidents receives the same standing as a company which has the same number of comparatively slight accidents.

"It has been suggested by one of the cooperating mills, that we keep our records on the same basis as that approved for the Pulp and Paper Industry by the National Safety Council. Nearly two hundred mills are now reporting on this basis to the National Safety Council, so if we can get our figures in the same form we can compare our records with those of other paper mills throughout the United States.

"The Crown Willamette Paper Co. has agreed to print some

"The Crown Willamette Paper Co. has agreed to print some simple blanks which can be used for our monthly reports. This change will require no alteration in the way in which you have been previously reporting, except that you will state the number of deaths and the number and nature of any permanent partial disabilities.

"The blanks for your use are now being printed and will be mailed to you in a few days. We will send to you, with the blanks, complete directions for their use. Thereafter, we will compute the severity and frequency rates for each mill, and send the results to you."

Longview Employe Experiences Bad Fall

K. S. Ramsey, chief boiler operator for the Longview Fibre Co., was injured January 21. Mr. Ramsey was working at night, when in some manner he slipped and fell down a narrow flight of stairs in the boiler room, striking his head in the fall. He was picked up unconscious from the floor of the boiler house and rushed to the Longview Memorial hospital. It was feared for a time that his skull might have been fractured, but the injuries proved to be less serious, and he was dismissed from the hospital in a week's time, and is now well on the road to recovery.

STATEMENT OF ACCIDENT EXPERIENCE-Month of December, 1928

Rank	Company—	1928 Standing Jan. 1 to Date	Number Employees	Man Days Worked	Number Lost Days Accidents	Total Days Lost	Lost Day Per 1000 Man Day
1 Pac	cific Coast Paper Mills	(2)	54	972	0	0	0
2 Tu	mwater Paper Mills	(10)	. 15	207	0	0	0
3 Fib	oreboard Products Inc., Sumner	(4)	116	2,716	2	4	1.47
	scade Paper Co.		240	6,665	1	15	2.25
5 Fib	preboard Products Inc., Port Angeles	(9)	245	5,689	1	15	2.64
6 Los	ngview Fibre Co.		387	10,062	6	46	4.57
7 Cro	own Willamette Paper Co		1.041	29,256	5	137	4.68
8 Inl	and Empire Paper Co	(3)	253	6,824	2	35	5.13
9 W	shington Pulp & Paper Co	(7)	398	11,165	7	100	8.96
10 Co	lumbia River Paper Mills	(11)	225	5.824	5	66	11.33
11 Ev	erett Pulp & Paper Co		375	8.851	5	104	11.75
12 Fid	lalgo Pulp Mfg. Co.		80	2.374	0	30	12.63
13 Rai	inier Pulp & Paper Co		235	6,906	5	107	15.49
14 Pag	cific Straw Paper & Board Co.		85	1,990	4	42	21.11
15 Sar	n Juan Pulp Mfg. Co.		122	3,700	3	99	26.76
					-		
			3,871	103,201	46	800	7.75

^{*}Reports incomplete for year.

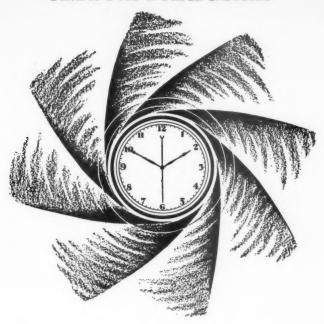
Figures set in black face type represent standings below the average of the month.

May Revive Idle Marshfield Mill

A possibility exists that the pulp plant at Marshfield, Oregon, which has lain idle for about 12 years and which is owned by the Coos Bay Lumber Co., may be put into operation in the near future, according to Portland men identified with the industry. The report is given credence on the grounds that the lumber company is carrying out an improvement program in connection with yarding and shipping facilities, with a view to increasing efficiency in the yards. It was stated that the program is preliminary to the projected rebuilding

of the pulp plant, which occupies a site in the lumber yards.

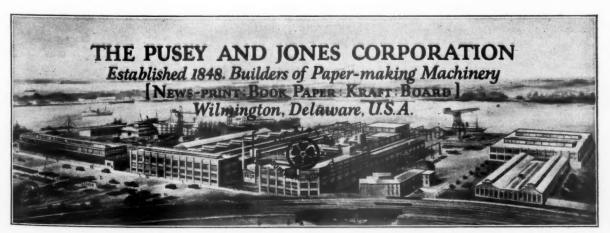
The mill is said to have been operated for a short time in 1917. It was soon found, however, that it was impracticable to make pulp by using salt water, although the promoters were said to have been assured by a chemist that the use of salt water would prove no handicap in turning out a good product. Following abandonment, some of the mill's equipment was moved to Ocean Falls, B. C., where it was installed in the plant of Pacific Mills, Ltd.



"Split Seconds"

Men may work by the hour and get paid by the week; but in the paper industry it's machines that are the real money-makers. What they can do in a split-second fixes the out-put... and the revenue of your plant.

An inch or two wider . . . a foot or two faster . . . and you're miles ahead!



When writing to Pusey & Jones Corporation please mention Pacific Pulp and Paper Industry

New Hooker Electrochemical Plant (Continued from page 35)

ling of various liquids is mostly located outside of the buildings, part of the tanks being of riveted construc-tion and part electric welded. The salt storage tanks have a capacity of about 300,000 gallons each, while the tanks utilized for the purification and storage of brine are approximately 75,000 gallons each. There are two 100,000 gallon fuel oil storage tanks surrounded by proper retaining walls.

Operations are described by the Hooker company as

follows:

"The process of manufacture is fundamentally based upon the Townsend Cell in which electric current is passed through a brine solution made from common salt (NaCL), thereby breaking up the salt into its two elements, sodium (Na) and chlorine (C1). The patents covering the Townsend Cell are owned both in the United States and abroad by the company and are operated on large scale at Niagara Falls and in Japan. The cell itself is high in efficiency, economical in power consumption and built in units of such large size as to render the attendance small and the floor space a minimum per ton of output. Whereas most electrolytic cells are operated at loads from 1000 to 2000 amperes, the Townsend Cells can be efficiently run at over 5000 amperes. The sodium flows out of the cell in the form of a liquid containing about 14 percent of caustic soda and with excesses of water and salt. This caustic liquor passes to storage tanks where it is held pending its purification and treatment to put it into marketable form.

Manufacturing Process

"The first step involves the removal of water by vacuum evaporation which is carried on in a set of evaporators where, as the strength of the solution increases, a large part of the salt is dropped out. At the outlet of the final vacuum pan the liquor contains about 50 percent of caustic soda, a small amount of salt, mostly in suspension and excess water. After this liquid is treated for the removal of the remaining salt it is in form for shipment as liquid caustic. For those customers who desire caustic soda in the solid form the concentrated liquor is run into cast iron pots containing nearly 20 tons of finished product and fired by oil in which the final traces of water are removed until the material reaches the fusion stage. It is then either pumped into steel drums containing about 700 pounds or is pumped to flaking machines and from these machines it is packed into steel drums for shipment as flake caustic.

"The chlorine is drawn from the cells in gaseous form by specially designed fans, and is treated for the removal of the excess water. In dry form chlorine gas is a very simple material to handle and is not corrosive, but in wet form chlorine gas can only be handled in lead, tile or similar resistant materials. After the drying stage the chlorine gas is distributed for the manufacture of various products. At the Niagara Falls plant of the Hooker Electrochemical Co. some 20 different chlorine products are manufactured and at the Tacoma plant the company is prepared to produce these various products as the demand in the West may warrant. At the start most of the chlorine will be shipped in the form of liquid chlorine which is made by a process of compression and refrigeration. Special compressors are used for the compression operation and the refrigeration is supplied from Co2 machines. Chlorine will remain in liquid form as long as it is held under pressure,

but when the pressure is released the material reverts to the gaseous condition. Consequently shipments of liquid chlorine are made in containers especially designed for the purpose.

The general supervision of the sales work of the company is in the hands of H. M. Hooker, one of the three vice-presidents; while A. H. Hooker, Jr., is sales manager for the Tacoma plant, with headquarters at Ta-

Other officers of the company are: Elon H. Hooker, president; Willard Hooker and E. R. Bartlett, vicepresidents, Mr. Bartlett also being works manager; J. A. Flynn, Tacoma superintendent. J. M. Rowland, chief engineer, designed and supervised construction of the Tacoma plant. A. H. Hooker is technical director and L. A. Ward is secretary of the company.

Doran Gets Big Welcome (Continued on page 45)

jobbers. He also commented on the growth of the paper manufacturing industry on the Pacific Coast. Rollie Ayres of the Zellerbach Paper Co. told some of his best Japanese stories in his best accent.

Then Ed Doran spoke and showed that he really and honestly appreciated the welcome the paper industry had given him to San Francisco. He said he wanted to be friends with all in the trade and promised to do his part in continuing and encouraging the cooperative

When the party broke up the delegates were congratulating Sollie Friedenberg and promising another gala affair at the Pacific States Paper Trade Association convention at Del Monte in May.

Those present at the banquet were:

W. B. Reynolds, General Paper Co.; L. J. Marymont and H. Gassett, San Jose Paper Co.; B. P. Jaggard, Cascade Paper Co.; Earn Van Pool and Lincoln Older, The Brown Co.; Charles Kahn, Pacific States Paper Trade Association; W. H. Thomas,

Kahn, Pacific States Paper Trade Association; W. H. Thomas, Cort Majors, and William Kelly, Fibreboard Products, Inc.; J. W. Towne, B. M. Hoblick, Edward Doran, Frank Lange and I. A. Gruener, Blake, Moffitt & Towne.

I. Zellerbach, M. M. Baruh, Rolin C. Ayres, Sol Friedenberg, Louis Colton, Mason Olmsted, Bert Neumann, and F. Gordon Murphy, Zellerbach Paper Co.; Thomas Doane, Doane Paper Corporation; H. Rueller, The Cupples Co.; J. R. Millar and M. C. Mitchell, California Cotton Mills; Augustus Johnson and J. Pope, Everett Pulp and Paper Co.; W. B. Collins, Columbia Rope Co.; Norman A. Buist, McLaurin Jones Co.; R. L. Lewis, D. S. Walton & Co.; Charles Kaas, Hampton Glazed L. Lewis, D. S. Walton & Co.; Charles Kaas, Hampton Glazed Paper Co.

Paper Co.
Fred May, Strathmore Paper Co.; D. L. Maxwell, The Tissue Co.; Sam M. Hawkins, Pacific Pulp and Paper Industry; Ned Skinner, Martin-Cantine Co.; W. B. Brooks, American Paper Goods Co.; Gabriel Ticoulat, Fred Wight, R. A. McDonald, Harry Goedje, Earl Knapp, Ray Dickey, Jim Towey, Bob Smith and G. E. Young, Crown Willamette Paper Co.
Andrew Christ, Jr., Western Waxed Paper Co.; Mills Waggoner, Better Packages, Inc.; A. G. Bellis, Heilbronn Paper Co., of Manila, P. I.; R. D. Reid, Union Bag & Paper Co.; L. J. Arms, National Paper Products Co.; Vic Savale, George La Monte & Sons; William Rothschild, Atlas Paper Co.
Shirlaw Mackay, Bag Division, St. Helens Pulp & Paper Co.;

Shirlaw Mackay, Bag Division, St. Helens Pulp & Paper Co.; W. J. McCormick, American Writing Paper Co.; George R. Davis, Pacific Coast Envelope Co.; Al Askenasy and Clayton Shaw, The Envelope Corporation; C. E. Swick and Sherwood Hancock, Graham Paper Co.; Charles Pritchard, Bonestell & Co.; Lloyd Riches, Western Paper Converting Co.; Elliott Epsteen, D. W. Hone and J. Cohn, San Francisco attorneys, and Ed Smith, Crystal Tissue Mills.

Manila Paper Merchant Visits States

A. G. Bellis, of the J. P. Heillbronn Co., paper jobbers of Manila, P. I., visited San Francisco in January on his way to northern and eastern mills. Friends said this was Mr. Bellis' first trip to the states in five years.



NO-BLIND VIBRATING SCREEN

Differential Vibration

In the differential vibration lies the secret of the high efficiency of the LEAHY NO-BLIND VIBRATING SCREEN even when handling enormous capacities.

In the following diagram is presented an analysis and comparison of the characteristics of LEAHY Differential Vibration with the simple vibration of other vibrating screen types.

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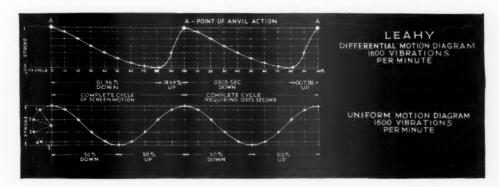
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STRATIFICATION — UNBLINDING — SCREENING — are the three phases of a LEAHY vibration cycle. These vibration cycles at the rate of 1,600 per minute are positively governed by the tool steel heat-treated cam of the rugged LEAHY vibrator.

Stratification is quickly and thoroughly accomplished in 18.64% of each vibration. During this phase of the cycle the screen cloth rises, projecting the particles upward with forces proportional to their masses. The oversize seeks the top of the material bed while the undersize rides the screen jacket.

Unblinding results instantaneously when the screen cloth is suddenly arrested with anvil action at the height of its amplitude. The wedged intermediate sizes are dislodged from the meshes.

Screening—the fines which have been stratified at the bottom of the material bed now sift through the meshes to capacity during 81.36% of the vibration cycle, at which time the screen jacket movement offers least disturbance.

This is LEAHY DIFFERENTIAL VIBRATION. The results are efficient sizing at large capacities with the least blinding tendency.

For Complete Information on the Leahy Screen or on Your Conveying Problems, write

WEBSTER-BRINKLEY COMPANY

SEATTLE, WASHINGTON

Manufacturers and Engineers of Conveying, Screening, Elevating and Transmission Machinery

Occident Groundwood Mill Again Operating

The groundwood mill at Edmonds, Wash., is again operating and late in January shipped its first carload of pulp East. After about a year's idleness production was resumed in January, following reorganization to form the present Dougall Woodfibre Co. According to company officials production will now be maintained.

The plant was originally built by the Occident Pulp & Paper Co. about two years ago and shut down after a short period of operation. After the Occident Pulp & Paper Co. suspended operations an option was taken on the mill by A. H. Dougall, who with J. H. Templeton and C. M. Dunn has formed the present company. These three men have refinanced the company and hold the preferred and common stock listed in the articles of incorporation. Mr. Templeton is a Seattle attorney and Mr. Dunn is a western lumberman who has been connected with the lumber industry in the Puget Sound region for a number of years.

George Wakeley, who has had long experience in various capacities in pulp and paper manufacture, is operating superintendent of the mill. Mr. Wakeley was formerly connected with the Tumwater mill and gained his earlier operating experience in eastern

Canada.

Some hemlock on Vashon Island in Puget Sound is owned by the company and, after production is smoothly under way, the pulpwood supply for the mill will be cut from this holding and transported in barges across Puget Sound to the mill. According to Mr. Templeton this stand of timber will last approximately ten years at the present rate of production. At present the mill is operating on pulpwood from the Puget Sound region purchased in small lots.

Ford Makes Trip East

Henry M. Ford, construction engineer associated with B. T. McBain, Portland, for the past several months, left late in January for New York, stopping at pulp and paper centers in Wisconsin, en route. He expects to re-

turn to Portland in the early spring.

Previous to his association with Mr. McBain, Mr. Ford was with L. A. DeGuere and V. D. Simons, two prominent pulp and paper engineers, in the order named. Before the last two connections he was a member of the engineering department of the Nekoosa Edwards Pulp & Paper Co., Wisconsin Rapids, Wis. With Mr. McBain and Vance P. Edwardes, Mr. Ford designed the proposed Northwestern Pulp & Paper Co. plant at Astoria.



YOU FEEL the cheering warmth of true hospitality as you enter the New Washington. An hotel thoroughly in accord with your wants.

"In the heart of everything" From \$3

Second at Stewart



U-BAR SLAB BARKING

in the

Union Bag and Paper Mills

"VERY satisfactory," say the Union Bag and Paper Mills of their **U-Bar** Drums used for SLAB Barking. And no matter how strict your requirements are for CLEAN pulp, the **U-Bar** SLAB Barking method will meet them. No unnecessary loss of wood fibre—just good clean barking.

Built to Fit the Job—The famous **U-Bars**, originating in this drum, are designed especially for this purpose in the strongest structural shape practicable. Made of special high-carbon steel and riveted to a series of ship channel rings. Slabs strike only the rounded tops of the **U-Bar**, thus bruising is reduced to a minimum.

Chain suspension with special guide rolls, sprockets and spring takeups made BIG PRO-DUCTION possible with smoother hence faster rotation. And the special rugged construction insures continuation of BIG output.

There are 300 in mills the world over—Ask the mills that use them.

The Morterud System

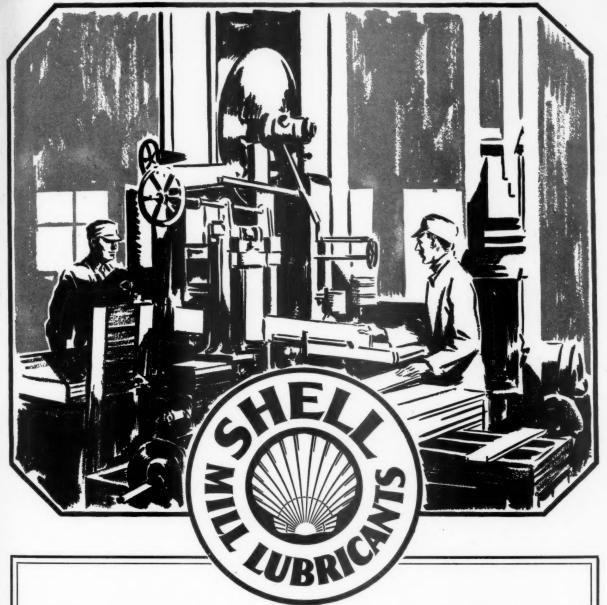
Production records of the Union Bag and Paper Mills also attest to the efficiency of the Morterud System of Indirect Soda and Sulphate cooking. It produces an even cook and a greater yield with forced circulation of preheated liquor. Steam is not introduced directly into the digester but circulates through a series of seamless steel pipes and the condensed water is pumped back to the boilers. Therefore there is no dilutions, but an actual increase in density of the black liquor. Less liquor used. Hence bigger and better production at lower cost.

Full Details Sent on Request

Fibre Making Processes, Inc. chicago, U. S. A.

Canadian Barking Drum Co., Ltd., Toronto





Burned out bearings aren't the only losses

YOU have to stop the machine and replace the bearing when it goes out and you can measure that loss easily enough.

But a much more frequent trouble is power loss from poorly lubricated bearings that show no outward sign of trouble. Power—steam or electric—costs you money. A transmission shaft that does nothing except transfer power to the wanted spot may be clicking up expense with every revolution. A machine that should run on ten horse-power may easily be using eleven—from friction.

You can't trace such wastes very easily. They're hard to find. Yet on reports from Shell field men we see many notes that read like this: "Too heavy oil in milling machine—losing power"—"waste packing needed in No. 6 machine to hold in lighter oil."

If you have the feeling that your mill is "eating" power, let a Shell man check your lubrication and see that it is correct.

Even a small percentage of power waste grows into big expense in a year. And the Shell man's services are free. Phone or write the nearest Shell depot.

Stockholders Of Colorado Mill Still Wrangling

Opposing groups of stockholders of the Colorado Pulp & Paper Co. of Denver have renewed hostilities after several months of abiding by an agreement not to interfere in any way in the handling of the firm by the receiver, George W. Beck. Now one faction is clamoring for an audit of the receiver's books just at a time when the mill comes up for sale according to a court order. The mill, it is reported, has been operating at a profit ever since the receivership began in September 1927 whereas it had been showing huge losses for many months prior to that time. Mr. Beck has stated that he welcomes an audit and the court has authorized one to be made. It has been stipulated that the audit be made by a public accountant appointed by the contending party and by one appointed by the receiver. Several times since the court ordered the sale the mill has been offered at public sale with an uplift price set at \$300,000. Prospective buyers have been deterred by the litigation in which the firm is enmeshed.

Superintendents Planning Convention

R. H. Kelly, general chairman, has announced his committee appointments to handle the various affairs of the Tenth Anniversary Convention of the American Pulp & Paper Mill Superintendent's Association, which will be held this year on June 6, 7, 8 at Wausau, Wsi. Mr. Kelly is general superintendent of all the mills belonging to the Marathon Paper Mills Co. Hotel reservations for the Wausau convention should be addressed to Wallace Shymanski, secretary of the convention committee, at the Hotel Wausau, Wausau, Wis. According to Mr. Shymanski, the 1929 convention promises to be the "best yet."



SIMONDS Circular Paper Slitters

Edge-holding—that explains why mills in every section are turn ing to SIMONDS for the Circular Slitters that give them better work and more production. Simonds Slitters are true to form and perfect mechanically.

Order them from any Simonds factory or service station.

SIMONDS SAW AND STEEL COMPANY "The Saw Makers"

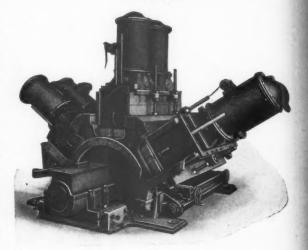
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International Grinders

For Four Foot Wood

Curtis Patent



Now built in two sizes.

Hitherto stone size 54"x54".

New design takes stone 60"x54".

Capacities 15-18 tons.

Full particulars upon request.

WE ALSO BUILD:

The Montague Screen.

The Curtis Patent Hydraulic Grinder Lathe.

Automatic Water Jet for cleaning Cylinder Mould Wires.

Automatic White Water Sampler.

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